The ART of SOUND PICTURES

PITKIN & MARSTON

THE ART OF SOUND PICTURES

Digitized by the Internet Archive
in 2015

https://archive.org/details/artofsoundpictur00walt

THE ART OF SOUND PICTURES

BY

WALTER B. PITKIN

EASTERN STORY EDITOR, EQUITABLE PICTURES CORPORATION; FORMERLY STORY ADVISOR, UNIVERSAL PICTURES CORPORATION; AUTHOR, "HOW TO WRITE STORIES"

AND

WILLIAM M. MARSTON

VICE-PRESIDENT, EQUITABLE PICTURES CORPORATION; FORMERLY DIRECTOR OF PUBLIC SERVICE, UNIVERSAL PICTURES CORPORATION; AUTHOR, "EMOTIONS OF NORMAL PEOPLE"



WITH AN INTRODUCTION BY

JESSE L. LASKY

D. APPLETON AND COMPANY

NEW YORK LONDON

1930

COPYRIGHT, 1930, BY
D. APPLETON AND COMPANY

PRINTED IN THE UNITED STATES OF AMERICA

PREFACE

WHICH MUST BE READ

You must approach these studies in the spirit which has moved us to publish them. Do not regard what we say as the last word on sound pictures. Regard it all as merely the latest word.

We are dealing with a new art which has not yet found itself. It is by all odds the most complicated art which man has ever devised. Beside it, the arts of the painter, the sculptor, the poet, and the musician are simple and easy. For it includes all these arts and many more besides. It draws much from the stage, yet it is not identical with stage drama. It feeds fatly on the short story, but cannot live on that diet alone. It borrows from the old silent pictures, but transforms all that it borrows. In short, it aims at wholly new effects through the use of wholly new technical devices.

As this book goes to press, Hollywood is just beginning to get its bearings in the art. The first period of panic and confusion is over. We now know that the talkies are no mere freak, doomed to pass as suddenly as they came. They must be mastered, for the public wants what they have to offer. But nobody has mastered them. We are all students —that is, all of us except the stupid people who are sure they know it all. And we cannot be sure how far we have progressed. Perhaps we have learned some things that we must later unlearn.

In our desire to make the book useful to story writers, directors, and producers alike, we have endeavored to reach

the deeper levels of interpretation. This has led us to many psychological analyses. Some of these are founded on laboratory tests and may therefore be regarded as conclusive. Others deal with matters which cannot be so tested, hence are less certain. And a few are frankly hypothetical. We believe that half a truth is better than no truth at all. We also believe that we aid the mature student best when we point out the various directions which psychological theories take, even when we cannot go the whole way with him.

The talkies are the only art that would attract Leonardo da Vinci were he alive to-day. It is the only art that excites a scientist's curiosity, the only art that challenges the engineer, the only art that offers the great artist a medium capable of expressing every human thought and emotion, as well as the pure æsthetic effects of color and music. It is a baby giant, as clumsy as all babies are. Its noises are, we grieve to admit, often as inartistic as the squalling of a baby. But squalling babies have a way of growing up into soft-voiced women and great singers. This is why we, the authors, have gladly played the rôle of nursemaids.

We don't know what the baby will be doing and saying when it grows up. But we are sure it will make its mark in the world.

W. B. P.
W. M. M.

CONTENTS

PAGE

PREFACE v

INTRODUCTION, BY JESSE L. LASKY xi

PART I

THE ART AND ITS TECHNIQUES

I. THE NEW ART 3

II. WHAT PEOPLE WANT 13

III. THE BUYER'S PROBLEMS 31

IV. WHAT THE CENSORS DO TO YOUR STORY . . 52

V. YOUR STORY 82

The plot and its construction—What is a plot?—The use of coincidence—Suspense—The four varieties of suspense—Fake twists in plotting—Character and character portrayal—Why the writer deals with character traits more than with personality—Dialogue

VI. RHYTHM 119

VII. FEELINGS AND EMOTIONS 127

Feelings — Emotions — Compliance — Dominance — Inducement — Submission — How people express their emotions—Normal relations between elementary emotions — Desire — Satisfaction — Passion — Captivation—Expressions of compound emotions—Abnormal or unpleasant emotions

VIII. SOUND EFFECTS 194

IX. TITLES 209

PART II

THE ART AND ITS MECHANICS

X. Sound Technique 215

XI. Color 241

Additive processes: multiple film processes; multiple image process—Subtractive processes: technicolor; multicolor

XII. Color and the Writer 259

APPENDICES

I. Glossary 269

II. Studio Sets Available for Stories 274

III. Moving Picture Periodicals 280

IV. Bibliography on the Emotions 282

Index 285

ILLUSTRATIONS

FACING PAGE

Railroading talkies 22

Al Jolson putting over one of his famous songs during the production of *The Singing Fool* 22

The stage is set 46

A barrage of cameras and talkie equipment recording chorus numbers 46

Testing subjects for their reactions to screen episodes . 130

Testing reactions to a compliance episode 130

Testing reactions to a submission episode 134

Scene used to test the reactions of blondes and brunettes to the emotion of inducement 134

Taking talking pictures upside down 196

Galloping talkies 196

The "heart" of talking picture production 226

Fanny Brice making her picture, *My Man* 226

A soundproof camera booth 238

Synchronizing film and sound 238

S. S. Van Dine designed this set 278

INTRODUCTION

In dealing with talking pictures the great difficulty is to curb one's enthusiasm. Overenthusiasm often fails to carry conviction. Yet in writing or speaking of the dazzling new dialogue development recently introduced to the screen it is easy to be swept off one's feet.

The authors of this book, Messrs. Pitkin and Marston, have very sensibly avoided this mistake. Their whole book reveals a strong faith in talking pictures founded upon close observation. Their restraint in treating the subject carries more weight as to the value of talking pictures than highly colored phrases would.

They are also sensible in handling talking pictures from a practical standpoint. With the addition of dialogue and sound to the screen, the motion picture has become more of an art than ever. But it is a very practical art. No theories for it can be developed over a long period which may come true eventually, as in other arts. The motion picture is a thing very much of to-day and it must meet the requirements of to-day.

The producer for the screen is face to face with certain almost unalterable demands in the way of story, characterization and casting—a circumstance which this book clearly recognizes. The very fact that the motion picture public is so vast, with over twenty million persons daily bringing to the film theaters their different desires, hopes, hates, and preferences, gives a faint idea of how very practical the talking picture producer must be to suit the patronage

that supports him. Recognizing this, the authors of this book have made no attempt to indicate a superior and novel viewpoint on talking pictures just for the sake of being "different." They have apparently said to themselves, "Here are certain problems that have to be conquered in dialogue films. What's the answer?" The result has been a practical handbook with some very stimulating ideas and carefully collected information.

The close analysis by the authors of the psychology of writing for the screen is very interesting. Messrs. Pitkin and Marston are of course well qualified for such analysis by their study of the human mind gained in teaching at Columbia University and by similar work in other fields. But their psychology is not that of the laboratory. Here again they base their conclusions on practical everyday conditions.

Their suggestions for ways of combining the action of the old silent screen with the dialogue of talking pictures challenge attention. This is not to say that their ideas for keeping the talking picture moving quickly are necessarily the best solutions.

Dialogue films are still too young for even the boldest to say what is the proper procedure in almost any case. But at this stage of their development any recommendations, carefully weighed, are helpful. And the ideas of the authors should stir thought.

Another point that stands out in this book is its proper understanding of the promising and almost unlimited possibilities of talking pictures. That is the most inspiring characteristic of the new screen form. Talking pictures have awakened the producers as nothing has done since the invention of films themselves. Those of us who may have felt that we were getting into a rut in making silent pictures now find ourselves put upon our mettle. We must

learn things from the beginning again, we must all start from the bottom of the ladder.

We have discovered not merely a new technique. We have discovered a new social force for the world, and a new ambition for ourselves. It gives an added zest to life to find, after years of a settled line of business, that we can still embark on new adventures in that business, backed by the momentum acquired from past hard work, the wisdom based on past experience, and the confidence born of past success.

We have been like Alexander the Great, sighing for new worlds to conquer, and now the audible screen suddenly offers us these new worlds. We realize that nothing hereafter can be settled or cut and dried. Now come colored pictures and the wide screen to broaden our horizons still further. All the vast possibilities for the future enrichment of the screen have had the way opened for them by talking pictures. I for one am very glad that talking pictures happened.

Jesse L. Lasky

PART I

THE ART AND ITS TECHNIQUES

INTRODUCTION TO PART I

THE motion picture industry, like Gaul, can be divided into three parts—production, distribution, and exhibition. All the big producing companies at the present time distribute their own pictures through their own exchanges. And nearly all producers also own and operate motion picture theaters. Despite the fact that all three branches of the industry are closely interlocked, we are not at all concerned, in this book, with distribution or exhibition of pictures. Production, however, holds our attention throughout all of its many departments.

Roughly speaking, we may divide the manufacturing or production of pictures into three stages. First comes the story and its preparation in continuity form for the screen. The story must always be the very soul of the whole motion picture enterprise. A poor story dooms the production despite all that popular stars, a famous director, and marvelous sets can do to salvage the picture. A good story may bring big box-office returns even though it is badly screened with mediocre actors.

The second stage of picture production consists in actually getting the story photographed on the film. The motion picture director is in active command of this colossal task. Sometimes the director's work is supervised by an associate producer or a supervisor. During this stage of the production sets must be built, players cast for the various parts, and scenes rehearsed and eventually photographed. Nowadays dialogue and music must also be rehearsed and recorded during this stage of the work.

The third part of picture making includes developing the film, cutting and arranging it in sequence, and preparing the prints for shipment to the exhibitors all over the world. This stage of picture production includes a vast amount of technical work in combining picture and sound records on the same film or synchronizing the film with sound records on discs like those of the phonograph. A large staff of technical experts

is required for this part of the work and what they do few writers ever know. In the present volume we assume that our readers are most interested in the first and second stages of picture production and least interested in the third. Hence, we devote the bulk of our pages to the art and its techniques.

THE ART OF SOUND PICTURES

CHAPTER I

THE NEW ART

A NEW art is here. And it is here to stay. All the learned critics who have predicted early doom for sound pictures have withdrawn into the silences, there to join that grand old man, Thomas Edison, who, less than a decade ago, stated flatly that people do not want talking movies. Six months ago we might have devoted pages and pages to countering the prophecies of self-appointed wise men. To-day, events have relieved us of that unpleasant duty.

Sound pictures, even though still far from perfection, have already attained levels of excellence which establish them in public esteem. Within a few years they will have improved as much as the silent screen did in a quarter-century. And, as that advance is made, the art of writing stories for sound pictures will increase in richness, in complexity, and in its technical difficulties. Already it bids fair to become the only art that can attract artists of the highest imagination and intelligence. As the silent screen rose miles above the older and more traditional arts of painting and sculpture, so the talkie will soar above and beyond the silent screen.

The importance of sound pictures extends far beyond the commercial movie house and its patrons. We believe that, in the course of the next few years, American business men, advertisers, and educators will awaken to the unparalleled potentialities of this new art in the realms of business and teaching. A few leaders already perceive the coming revolution, and in time the rest will follow the vision.

Astounding as it may seem, nevertheless we defend the statement that elementary schooling can be made twice as effective in about half the time now required, as soon as teachers learn how to prepare sound pictures for classroom use. Professors Daniel C. Knowlton and J. W. Tilton, both of Yale, have conducted extensive tests with silent pictures in teaching seventh-grade pupils; and they have demonstrated that the latter learn 19 per cent more and remember 12 per cent more of their lessons than do the pupils who learn from books, unaided by pictures. Even more striking is the tendency of the pupils who see the movies to read 40 per cent more spontaneously outside of required class work.

All this with silent pictures. What if these same pupils had both seen and heard things about their subject in the form of a well-devised sound picture? Their interest, their assimilation, and their retentiveness would, we are sure, far exceed even the favorable records which Knowlton and Tilton have established.

As for advertising, the sound picture obviously combines the best features of the silent picture and radio broadcasting. But to these it adds effects all its own, not the least of which is that, unlike radio, it cannot be escaped by the mere turn of a dial. A listener, sitting

alone in his own home, can and does cut off the sales talk at will—and usually he so wills. But let him be in a motion picture house, or any other gathering place, and he cannot and will not flee so deftly.

Nor will he wish to flee the sound picture, for it offers him far more in the way of interest and pleasure than any radio chatter can. People appear. There is action. Color may add its lure to the complex. And—what is probably most important—there can be news or story values, or some attractive personality, directly presented in the screen version of the advertisement. All this, to be sure, calls for great skill in story writing, as well as in the technique of sound pictures; no mere copy writer in an advertising agency can dash off effective talkies for a client. It is an art apart. And the business man who grasps this fact first and applies it to his own enterprises will reap a rich harvest.

In the following pages we shall sketch the new art in so far as it has taken form. And we shall endeavor to describe the resulting techniques, excepting only the more complicated details of sound recording. As you study these, bear in mind that every month of the next five years will add something novel in the way of producing artistic effects through the combination of photography and sound. Some of these novelties will come from actors, others from directors, still others from story writers. But all of them will finally come back to the writers themselves as problems and as opportunities.

The problems which this new art raises are the chief subject of this book. The opportunities they create should become the reader's inspiration. They are adding a cubit to the stature of the author who can make good in sound

pictures. It is already apparent that the mere addition of talk to the picture has made the author vastly more important to the producer. Story writers and dialogue writers are commanding prices in Hollywood which only a few lucky leaders could have hoped for five years ago. The rumor runs the rounds that, ere long, the men and women who succeed brilliantly in fiction suited to sound will force companies to pay them royalties in addition to salaries.

Why should this be so? Simply because the story is by all odds the hardest ingredient to create. To master the intricacies of human nature, to depict these intricacies in visible motions and audible sounds which convey them clearly to hundreds of millions of people all over the world—there is a task calling for superb sensitivities, lively imagination, and persistent study. It goes far beyond story writing for magazines and books.

The literary story is hard enough, heaven knows. It calls for a thorough understanding of the kinds of people you set out to depict. It cannot be of high quality unless the author can plot well. And, of course, it must be cast in distinctive style. The picture of the silent screen does not demand literary abilities, but it does require insight into character as well as drama; furthermore, it is founded upon a high order of visual imagination. The stage play, in a certain sense, calls for all the chief abilities of literary stories and silent pictures; and, in addition, it must be managed with dialogue, which is something very different from literary language. But the sound picture goes beyond all of these other art forms. To invent a good one, you must grasp character, drama, settings, and dialogue. But you must go beyond these.

You need a fanciful ear. The backgrounds of your story now cry out. The tale is filled with noises. And every least sound adds a unique quality to the total effect.

Do you show us a young bride in her new kitchen? Will it heighten the emotional effect which you aim at if you let us hear the breaking of egg shells and the sputter of bacon fat, as she prepares her darling man's breakfast? Or will all this turn a serious situation into a ludicrous one? Are you fashioning a melodrama of simple life back on the old farm? Will you bring to the ears of your audience the lowing of kine, the bark of the shepherd dog, and the clatter of the mowing machine in the hot hay field? Then, first of all, you must understand whether, in the given scene and action, the moo of a plaintive cow will make your listeners giggle or mourn.

Here is an unwritten chapter in psychology. It will find form chiefly through slow experiments in the studios. But some authors will early develop a feeling for sound effects and will profit enormously thereby.

The would-be writer of stories may wonder why we drag in such a bewildering array of technicalities as color photography, the mechanics of sound reproduction, the cutting of film, and so on. Our answer is simple.

There is only one ideal way to make a picture. The man who conceives the story should direct its production in the studio and, above all, should assemble the various scenes after they have been photographed. In other words, a motion picture should be singly visioned and singly executed, just as a great painting or a brilliant novel. It ought to be the expression of a creative personality.

Hence, the ideal story writer is he who, after having dreamed the tale, can cast it upon the screen effectively. First, he writes his story in brief narrative form; he then prepares its continuity, down to the minutest detail of set and sequence; next, he selects his cast and supervises the stage carpenters, the scene painters, and the company rehearsals. He arranges the lights and instructs the camera men as to the best angles and distances of shots. The photography done, he assembles all the shots, so as to produce most accurately the effect at which he has been aiming. Then, and only then, has he expressed his story.

No such ideal story writer has ever appeared—in Hollywood or elsewhere. Several circumstances have conspired to block him from birth onward. Above all stands the insuperable difficulty of dominating the hundreds of people in the immense organization which makes the picture. No other art has ever been overwhelmed by such a horde of indispensable subordinates, any one of whom may, by accident, whim, or malice, wreck a picture. Actors are temperamental folk. Stage carpenters may be as dumb as driven cattle. Wardrobe managers can all too easily delay production enough to turn financial success into failure. And so on, nuisances without end.

The second difficulty lies in the artist himself. To create a complete screen story, he must know ten times more than any novelist, painter, or dramatist. He must understand the management of people, the effects of outdoor light, the composition of interior sets, the effect of dialogue, the manipulating of incidental sounds, plot, character, film cutting, and heaven knows what not. Only one art can compare with it, and that is architecture.

Probably not one person out of every hundred with a good story-mind possesses the aptitudes for management, engineering, and photography which are required here. Hence, the trend toward specializing. The industry must get results quickly. It must get them cheaply enough to make money. And it need make pictures no better than the average man will buy. Ideal story writers and ideal production methods are not necessary. And they never will be. The world public has very low standards of taste and is easily amused. Furthermore, it demands a steady stream of entertainment; and no story geniuses can ever hold the pace set by that demand.

Supreme genius in the pictures always must be somewhat rarer than in drama and general literature; and very much rarer than in the simple, personal arts such as poetry and sculpture. As the industry runs, we must employ, not geniuses, but specialists and technicians in a hundred and one subordinate arts. One invents the plot, a second prepares the continuity, a third estimates the cost of the sets, a fourth fits actors to the parts, a fifth finds locations, a sixth arranges sets in the studio, a seventh handles the sound recording, and so on, and on, and on. All of which makes for mediocrity and sure, prompt sales.

Why, then, should we bore you, gentle reader, with all the details of these many subdivisions of work? You will never become the ideal story genius. Why not stick to your own specialty, the devising of stories suited to the screen?

Well, you will find, as you advance in the art, that a knowledge of all the conditions under which a story is produced will aid you tremendously in choosing story

material, as well as in handling the material chosen. You will be surprised at the strange variety of episodes, character traits, and scenic effects which cannot be used under prevailing trade conditions. The censors bar many. Cost bars others. Time factors exclude another group. Limitations of visual perception in your audience make others impossible. The human ear forbids thousands of words and phrases which are admirable on the printed page. And so on. Medium and method are your masters here. They shackle your free fantasy far more than you realize at first. So, if only to avoid wasting your time and energy, you ought to know as much as possible about every stage in the producing of a sound picture before you attempt to write.

But this is not all. There is a positive advantage in grasping the larger scene. The camera and the sound recorders cramp your style in many ways, to be sure; but they also offer you opportunities undreamed of. You can seize these opportunities only after you have comprehended the mechanics of the business. The more you know, the better will be your strategic position with editors and directors.

And the more you know, the surer you become of the startling fact that *your medium is not the story idea. It is not the words with which you record this idea on paper. Your medium is the studio and all its people and paraphernalia.* A man may be almost illiterate and still become a marvelous picture director. And conversely, the cleverest fiction writer in the world can all too easily fail in Hollywood, if he persists in the illusion that the ideals and rules of fine writing are the basis of fine pictures.

So please toil through the technical chapters of this book, however hard some of the pages may be.

The beginner is almost certain to assume that the main problem of sound pictures is the adding of talk and music to the old-fashioned silent movie. Why shouldn't he think so? He finds a highly developed art of the silver screen all ready at hand. He beholds physicists and engineers perfecting mechanical devices which reproduce sounds and synchronize them with screen pictures. How natural, then, to suppose that he must learn how to affix the sounds to the silent sequences!

This is precisely what ninety-nine out of every hundred directors and producers believed during the first year of the new invention. And that is one of the chief causes of the wretched quality of the talkies which were then produced.

We now realize that *sound is not something to be added to the silent motion picture. It is, rather, a basic factor in a wholly new art which also makes use of motion pictures.*

When you strike down to the heart of the silent picture's technique, you find that it employs two main factors and two subordinate ones. The main factors are setting and pantomime. The two subordinates are title and musical accompaniment. The title explains facts, while the music reënforces the emotional tone of the dramatic action shown in pantomime. The heart of the whole business, however, is pantomime. And the handling of all the factors depends, first and foremost, upon the conveying of effects through the visible motions of hands and feet, of arms and legs, of faces and bodies. The geniuses of the silent screen have all been people who

could see and tell stories through the medium of such motions. This is equally true of the story writers, the directors, and the actors.

Now, a few attempts to affix talk to pantomime will speedily convince the stubbornest mind that the scheme will not work. Language introduces changes of appalling subtlety. The entire structure of the original pantomime has to be torn down, and something new erected in its place. Likewise with the old titles and the primitive musical accompaniment. So we find ourselves back again to elementals. We must start afresh with the story itself and build from there.

Stories suited to pantomime may prove ill-suited to sound pictures, and vice versa. Hence, we must attack the new art at its foundations, which are the story and its human appeals. More clearly than ever before do we realize that "the story's the thing." All the rest is mere technique. This is why we must go over what may, at first glance, seem to be old ground. We must inquire briefly into story values as they are affected by the factor of sound.

A complete survey of story values cannot be made here. The subject is too large. If you wish to consider it at greater length, you may profitably read *The Art and Business of the Short Story* (Macmillan), and *How to Write Stories* (Harcourt, Brace), both by Walter B. Pitkin. The first book handles the subject from a cultural point of view somewhat broader than the second, which is especially adapted to the craftsman.

CHAPTER II

WHAT PEOPLE WANT

PEOPLE go to moving pictures to be made to weep or laugh, to be happy or unhappy as they watch what happens to the screen characters before them. They become completely absorbed in the screen action. They follow the story, willy-nilly. And in so doing, they are forced to feel the emotions aroused by the dramatic situations of the picture. So it is that the producer of motion pictures makes millions of people, day after day, feel glad or sad, courageous or fearful, righteous or angry. He can do this, that is to say, within limits, and these limits largely depend upon the story of the picture. If the producer has a powerful enough story, these millions forget themselves and their little joys and woes and escape into the scenes on the screen before them. Small wonder then, that, with such stupendous power over the thinking and feeling of myriads of men, women, and children, the moving picture producer is willing, even eager, to spend hundreds of thousands of dollars—or even a cool million or so—to secure and produce a picture for this world of movie-goers.

But the story selected must itself have power enough to arouse the emotions of an audience. Excellent photography and good acting can help to carry successfully any story, but they can never put emotional meaning into a story that is built without emotional appeal.

The writer all too readily believes that people all over the world like what he likes and want what he wants in fiction. His first—and sometimes hardest—lesson is to unlearn this.

The limitations of the average man furnish the picture writer with his greatest opportunities.

The average man is not imaginative. His free fantasy is feeble indeed. So the writer lends him a richer and fairer one.

The average man cannot think clearly about many things. He would like to, but lacks native ability as well as wealth of experience. So the writer does his thinking for him.

The average man seldom knows what he wants. He usually imagines that he does, but he is forever being disappointed. When he gets the things he thinks he has wanted, he finds them unsatisfactory. So the writer clarifies his wishes and sometimes supplies the objects of desire, at least in dream form.

The average man cannot express himself well. His vocabulary is meager and clumsy. His opinions—such as they are—rarely come out in phrases that seem quite right to him. So the writer becomes his spokesman.

All this often seems dull to the highly imaginative writer. He would prefer to go riding on the wings of his own fantasy. And, if he is vastly more imaginative and mentally active than the larger motion picture public, he may miss the higher success of a rival whose mind moves more nearly in step with that of the average man and woman.

Most writers who aspire to the screen have been trained in the ways of literary work or journalism. This

gives them the wrong slant on sound pictures. For the difference between the public that reads and the public that patronizes movie houses is vast.

When you write stories for the magazines, you know in advance that you are trying to reach people who can read. Usually your customers will be people who can read pretty fast. But when you devise a story for the pictures, you must bear in mind always that thousands of people who will look at the finished product on the screen will be very young children, slightly educated adults, or intelligent immigrants with an imperfect knowledge of the English language. They will read either slowly or not at all, and those who read slowly will be unable to understand words and expressions which are a little unusual.

To make your story satisfactory to them, you must first of all make it easily intelligible. This means that you must avoid all explanations, printed or spoken, which involve words beyond the comprehension of an ordinary ten-year-old child.

This technical limitation was bad enough in the days of the silent movie. It is ten times worse to-day, since the introduction of dialogue. For, to keep the conversation and interplay of ideas among the characters of your story down to this primitive level of expression is a task of extraordinary difficulty. It is a little like trying to explain Einstein's theory wholly in words of one syllable. No playwright has ever been thus handicapped, for plays are addressed, in the main, to fairly sophisticated adult audiences. The only people who have had much experience with elementary dialogue are a few of our most popular writers of best sellers and the writers of vaudeville sketches.

There is a physical peculiarity of movie audiences, as well as a mental one. Its importance is seldom realized.

In a theater, spectators are prevented from expressing the attitudes which the picture story forces them to take toward the things and people in the picture, by means of overt bodily behavior. Your audience is seated in chairs in a darkened room. They cannot even talk during the showing of the picture. Yet, a good picture constantly compels them to take internal attitudes toward the people and situations which appear on the screen. The very fact that they take these internal attitudes carries with it the corresponding series of emotions. And these emotions are intensified by the fact that the people in the chairs cannot express their actions by shouting, brandishing their fists, walking up and down, or any other vehement activity. You have them, therefore, where you want them. They can be aroused, emotionally, to the maximum of their capacity for emotional experience. And you must remember that they come to the motion picture theater for the express purpose of being thus aroused. If you let them down, they will be disappointed, and the picture will not be a success.

If you wish to arouse a feeling of pleasantness in a motion picture audience, you must give them characters and situations which they accept and want more of. You must make the character or situation such that the audience will take an active attitude of alliance with it. They must wish to prolong situations and to hold their characters.

If, on the other hand, you wish to make a character or a situation in your story thoroughly disagreeable and unpleasant to your audience, you must depict the person

or the circumstances in such a way that, *while retaining an active interest,* the spectators will wish to be rid of the disagreeable feelings thereby aroused. They must feel active antagonism. They must want to compel the characters in the unpleasant situation to change their behavior in such a way as to create a pleasant feeling in the spectators.

A word on a peculiarity of public taste which is far too intricate to get its due attention in this book. We refer to the changes in likes and dislikes from week to week, from season to season, as a result of people growing weary of the good things they have been getting or of the unpleasant things which have been vexing them. Here is the trickiest of all psychological tendencies: that variety which is the spice of life. Nobody has ever analyzed it to its core.

We must approach this question from two angles. First we must take the psychologist's usual point of view and inquire into people's responses to given stimuli *when they are in condition to react to these alone.* We must proceed as an oculist does when he tests your eyes. To ascertain how well or ill you see, he must inspect and measure your eyes when they are in a condition of rest. If you have just been staring into the sun, or reading a book of fine print for hours, or recovering from some disease which has affected your eyes, he cannot do much for you. He will ask you to sit in a dark room for a while, or to come back after the effects of the disease have worn off. In a word, he must wait until strong after-effects of earlier stimuli have worn off.

So, too, in measuring emotional responses to motion

picture stories. People respond in one manner when they are in a state of rest, comfort, ease, and freedom from fatigue, worry, or excessive stimulation. They behave quite differently after a strong emotional shock, or when exhausted from a hard day's work, or in the midst of some worry, or after having watched some other picture than the one you want to use as a test. We all have hang-overs of many kinds. Each hang-over influences our mood in its own special way. Some hang-overs linger for only a few minutes. Others last a whole day. A few may last for weeks or months.

Your response to a picture in which the death of a woman is depicted will take on one form if you have never loved nor hated nor feared a woman such as the one shown dying in the picture. It will shape up differently if you have just returned from the funeral of a woman whom you have long known and liked. It will be totally different if a woman strongly resembling the one in the picture has lately defrauded your maiden aunt out of her fortune.

We all know this well enough. But few of us apply its lesson to the problems of writing stories and selling them. We think that, because our story evokes agreeable feelings and memories in a normal person who reads it when he is fresh and healthy and looking for some pleasant entertainment, the entire public will surely like it too. We overlook the fact that perhaps the public has lately had its fill of the kind of pleasant entertainment which our story supplies.

People want to be brought back to a state of pleasant excitement. But where are they when they want to be

brought back? It all depends on the place and the time. It is a matter of seasons, of trends, of current events. After the World War, millions wanted anything that would help them forget the filth of human combat and the criminal stupidity of war-makers. To-day, nobody needs or wants that variety of oblivion. Still there remains a widespread interest both in oblivion and in war. The causes have changed, and so, too, have the special publics.

Take the shift in war interest. Men and women who were involved in the World War still smell its stench, and hate it, gore and glory alike. But we have with us to-day tens of millions of young adults who were babes and juveniles between the years 1914 and 1918. While the fighting was going on, they understood nothing and experienced little, save the flag waving and the silly propaganda of the governments. As the years passed, they listened to the veterans, to the tales of returning tourists, and to the swelling chorus of poets and novelists who cashed in on the bloody episode. They realized that they had missed something big, and they were deceived about its nature, just as we all are deceived by stories of things we have never seen face to face. So, to the rising generation of to-day, the War is a strange alluring welter of romance. It is an escape from office drudgery and school lessons, just as in 1917 the oblivion of wild parties was an escape from the nasty monotony of the trenches.

Thus, as one generation ages and a next attains full stature, we find conflicting tastes and trends; and nowhere does this emerge more sharply than in the pictures, which aim to please all the large classes of humanity. The pleasant excitement which one class craves is some-

times the very opposite of that which another seeks. Unless, therefore, we keep clearly in mind the fact that, at any given time, there are dozens of different age groups, worker groups, social classes, and so on, each sighing for momentary delivery from troubles and weariness all its own, we shall end up in a mental muddle. It is the place, the time, and the man that determine the strongest appeal for that man at that time and that place.

No matter how good a thing is, our liking of it is conditioned by what we have been doing in the preceding days and hours.

An excellent example of the way in which the saturation point is reached in a good play is illustrated in *Broadway*. The stage play was an instant and tremendous success. It set a new vogue. The play ran for many months in New York City and was offered to the country at large by several stock companies during the same period. As usual, dozens of producers slavishly imitated it in the hope of grabbing some of the profits. Several imitations proved excellent. The country was deluged with plays about Broadway night life and gunmen. Then all Hollywood was sold down the river. Almost every picture producer became a slave to the Broadway habit. Dozens of pictures, many of which were shoddy steals from the play, were shown all over the world. So far as we can ascertain, all competent critics agree that, by all odds, *Broadway* remains to-day unsurpassed in its class.

If every picture succeeded in direct proportion to the intensity and variety of its emotional appeals, it would follow that the screen version of *Broadway* would have to triumph over its rivals quite as much as the stage play

outran its stage competitors. Box-office receipts, however, proved all too clearly that nothing like this occurred. The admirable sound picture, which won the approval of nearly all New York critics, has fallen far short of its producer's expectations. And why?

Simply because the picture was released nearly three years after the vogue began. Dozens of inferior night life pictures were unreeled before movie fans throughout 1927 and 1928, and the first half of 1929. When *Broadway* reached the screen in the early summer of 1929, the entire public had been so fed up on this particular brand and flavor of entertainment that the picture barely missed being a flop in the large cities. Nobody can enjoy the twentieth dish of ice cream, even if it happens to be much better than the first nineteen dishes which he has stuffed inside of him.

Writers may note that some pictures have succeeded without sex appeal. First of all, the pictures of Charlie Chaplin. Then those of Douglas Fairbanks and Harold Lloyd. Then Buster Keaton and Harry Langdon. Then come occasional pictures, with lesser stars, such as *The Covered Wagon, The Big Parade, The Four Horsemen,* and so on.

Have all of these anything in common? Only one feature stands out unmistakably. *In every one of them, sex interest is completely submerged. It is subordinated to character drawing, or to complications, or to sheer spectacle.* Whenever you find a romance here, it is thin and tacked onto something far bigger or far funnier. And you find no trace of red hot sex appeal, such as Pola Negri injected into the screen.

What has been the most recent picture success in Great Britain? That sad, tear-drawing thing of Al Jolson's, *The Singing Fool,* which is about as sexy as the *Encyclopædia Britannica.* Box-office receipts have smashed some records over there. At date of this writing, nearly $3,000,000 has been paid by the English to weep over the picture; and more than 2,000,000 records of the theme song, "Sonny Boy," have been sold for home phonographs.

Here we see reflected the curious conglomerate of humanity which makes up the world's picture audience. Most of its members are young people, many of them children under twelve years of age. The latter do not respond violently to sex appeal. And the adolescents respond unpleasantly to it, on the whole; they are just growing into sex life, and it sets up "growing pains." Frank, suggestive pictures embarrass some boys and girls between the years of twelve and eighteen. This is partly a by-product of Puritanism, at a time when profound psychic changes are taking place.

Now enters still another factor to block the normal interest in sex appeal stories. The motion picture house is a family gathering place. It has, in a sense, taken the place of the ancient town meeting and the less venerable corner grocery. In it, all sorts and conditions of human kind foregather. And each variety acts as a restraining influence on all the others. The restraint is exceedingly subtle. It resembles that vague embarrassment which occurs so often when many men and women, all strangers to one another, are brought together at a dinner or dance. They are ill at ease. And for the best of primitive reasons. They do not know how the other guests will



RAILROADING TALKIES

Using a miniature railway for cameras and microphones to obtain unusual traveling shots in *Marianne,* starring Marion Davies and Lawrence Gray. (Courtesy of Metro-Goldywn-Mayer.)



AL JOLSON PUTTING OVER ONE OF HIS FAMOUS SONGS DURING THE PRODUCTION OF *The Singing Fool*

The camera is in the soundproof booth at the extreme left. (Courtesy of Warner Bros.)

respond to remarks or acts. So they feel their way cautiously, lest they arouse wrath, or ridicule, or something worse.

At a motion picture performance, the spectators respond most freely to those scenes which they know appeal in pretty much the same way to everybody present. All their social training inhibits free response to whatever they know, or even faintly suspect, moves various spectators differently. Display a picture in which a rowdy jest at some Jewish rabbi or Roman Catholic priest is uttered. What happens? If your audience is a typically American one—which means highly mixed as to religions, age, sex, and social class—you may be sure that few people will laugh, while many will feel uncomfortable. Poke fun at any race that is well represented in American society, and usually, though somewhat less uniformly than with religion, your would-be wit fails.

So with sex. People respond in widely different manners to sex appeals, both in real life and in art. One man hates the very sight of a prostitute, while another is lured by her. One girl thrills at Valentino, while her own sister jeers at him. Some folk regard all sex as a loathsome disease, while others consider it the most uplifting influence in human experiences. So the larger public, which embraces all these citizens, cannot "get together" and respond as a social unit toward pictures whose dominant theme and interest center on sex.

All of this in no wise contradicts the view that sex is the strongest of all appeals. In fact, *its excessive strength is the chief reason why people react so variously to it.* A picture whose success depends upon its pleasing a hundred million people in thirty nations obviously must

follow what newspaper editors call "the law of the least common denominator." Every deviation from the average is dangerous to the box office. Scenes of the highest intensity will please one small section of this colossal public, and will no less certainly displease some other section, which may or may not outnumber the former.

What the high-brow critic calls the magnificent mediocrity of the movies is a necessity that is born of the very popularity of the pictures themselves. What an artist may think is the finest possible picture often turns out to be the finest only for a few thousand artists. The striving of a certain superior class of story writers for tremendously emotional scenes is often based upon a profound misunderstanding. Select one million people at random from all motion picture houses on earth, and you will find among them not more than one or two in every hundred who enjoy a steady diet of such highly intense stories.

It is not wholly wrong to compare the motion picture tastes with those which are reflected in people's preferences for food and drink. The highest intensities of flavor will be found in such things as rare old cognac, caviar, limburger cheese, raw onions, and red peppers; but did anybody ever live who regularly ate these three times a day in preference to roast beef, medium, or ham and eggs? Foods and drinks of maximal intensity are chosen only at intervals. We preserve our balance best if we eat plainer food as a steady diet and indulge ourselves in the more potent viands three or four times a week. Thus with the stimulation of pictures. Nothing else can explain the perennial success of crude and insipid slapstick comedies and western cowboy stories.

Nothing else can explain also the unfailing popularity of the minor variations on the gentler type of love story, in which sex or erotic interests are softened and mellowed in many delicate ways.

It has long been recognized that there are modes in pictures. One company will make an outstanding success along some particular line, as, for instance, night club life. Forthwith, every other big producing company imitates it. Why?

If the public responds whole-heartedly to one picture portraying night club life, the producers feel that there will be a similar response to the next ten or twelve. This public reaction to the first picture of the night club type is a weather vane, which they must follow if they would protect their large investments in each succeeding picture.

This reasoning is not altogether sound, nor do producers always succeed by following this rule. Nevertheless, the clever writer who would succeed in writing stories should study closely the vogue in pictures from season to season. The producing companies always know about the pictures other companies have made, some time before they are placed before the public. By the time the picture has been exhibited for a week, there is a fairly good indication in the box-office returns as to whether it will be a financial success. Prior to this box-office test, other companies, acting on their knowledge of pictures about to be released, have doubtless secured options on material of a nature similar to that of the picture to be tested in the box office. If the returns are favorable, they immediately put a number of these stories into production. The enterprising outside author should there-

fore follow the program announcements of the different companies and, if possible, should secure advance information from the film publications as to future pictures. A list of these publications will be found in Appendix III. He should also watch carefully the box-office figures, given in *Variety,* on newly produced and released pictures, to see how solidly the picture "clicks."

If a new type of picture is successful, the mode it establishes may run from three to nine months, or even a year. During this time, writers of originals may hope to sell stories of this same type to Hollywood producers. Having assured themselves that a new vogue has been started, writers should hasten to work out story plots and characters along the same line.

Hollywood producers were not convinced of the potential success of pictures in natural colors, with revue numbers, until Warner Brothers produced *On With The Show,* which made an instantaneous hit. Thereupon, every other company rushed to release revue pictures. A hurried scramble for color photography also began. Nobody can say precisely how long either of these vogues will last.

Follow carefully the newspapers. While an event, especially one which carries a very strong emotional appeal, is being headlined in the newspapers, it is forced upon the public's attention. If a story can be written, and the picture produced, before this tremendous effect has worn off, there is additional assurance of public response to the picture. This is especially true of a news event which has been repeated several times over a period of months or years, with cumulative emotional interest.

An example of this may be found in the submarine disasters and the resulting picture *Submarine*. The United States had lost several submarines since the War, because these dangerous undersea boats were sunk, with men sealed up alive, fathoms deep under the sea. The most recent disaster was that of the vessel which was sunk by a revenue cutter off Cape Cod. Signals were heard from the crew, and the public was kept at a high pitch of excitement for several days, before it was finally determined that all hope was lost. Public interest was kept alive for a much longer period while salvage operations were under way to raise the boat. Finally, when the submarine was raised, there was another period of public interest in the finding of the bodies and of notes or other messages that told how the men died.

The motion picture value of this event lay, first of all, in the tremendous newspaper and magazine publicity which it received. But it lay as much or more in the extraordinarily intense emotional appeal. When men are sealed alive in a steel boat 120 feet below the sea, there is a universal desire to save them. The flood of messages received by the naval engineers, suggesting every possible and impossible device for bringing the boat to the surface, or for getting air to the submerged crew, was evidence enough of this. Add this tremendous emotional appeal to equally tremendous publicity, and you have an ideal picture subject.

Submarine was produced very cheaply by Columbia. But the box-office returns far exceeded those on most super-productions.

Of course, not all big news stories can be translated to the screen. Writers should also analyze the emotional

value of the episodes. Do not hope to sell stories about a given event solely because it is played up prominently in the news. The event must have some intrinsically human appeal.

Best of all are those broader trends which crop out in a thousand and one news items, year in and year out. We refer to such things as the jazz age and the crime wave. These are not single events. They are streams of events. They disturb millions of people for a long time.

You recall how, around 1918, there developed an intense moral issue over the jazz age. Older people rebelled against this and endeavored to suppress it. Young people ran wild. As for the crime wave, all of our better citizens have been aroused to the dangers growing out of the vast corporations of gunmen, dope peddlers, and rum runners that run our large cities.

Why are such trends better than big news stories of the ordinary sort? Simply because they have been influencing people in many ways for a long time before you, the writer, present a story about them on the screen. The public has built up a solid background of attitudes and emotions. This spares you the hard necessity of educating millions in the subject of your story.

A word to sum up this most intricate of all writing problems. What do people want? The practical problem is far removed from the theoretical one that is usually attacked by psychologists. Otherwise, every large industry would long ago have perfectly organized its sales departments and its selling campaigns.

Strictly speaking, we must get back to the individual and to some place and time. It is unscientific to ask what

people in general want. They want nothing. The question is almost as foolish as an inquiry into the average number of words in a conversation. There may be some such average. But, once you have discovered it, you find it is meaningless.

What you, the reader, would most enjoy at this very instant cannot be determined by any universal formula. It is in a peculiar sense a historical problem, as well as a biological one. What you would now like to do, to have, or to be, depends upon your actual state of mind and body. Have you just eaten breakfast? Then you do not crave food. Have you gone without water for a day? Then you are almost crazy for a drink. Have you just quarreled with an old friend? Then you may be in a bitter mood and cannot enjoy anything while the mood lasts. Have you been away in some Arctic wilderness for six months, without even a newspaper to read? Then you may well be wild over almost any kind of a story or play or picture. Are you ten years old, or thirty, or eighty? Are you robust or sickly? Perhaps a powerful emotion, even though momentarily pleasant, may be the one thing you would most emphatically shun. Are you fat? Then you dislike hot weather and strenuous exercise, both in reality and in motion pictures. Do you suffer from hay fever? Then it may be that you loathe a photograph of a hay field and enjoy one of high mountains, which suggest air free of weed pollens.

As with you, the individual, so with your neighbors and countrymen. Certain events and conditions of widespread influence will tend to give many of you similar likes and dislikes at a given time. Then we see a vogue arising. Should those influences persist many years, the

vogue passes over into a regional preference. A few influences, such as those of climate and drinking water and type of local food supply, are so profound and so nearly permanent over large areas that they may determine public taste far more than people suspect.

How hard to analyze the whole mesh of such subtle forces! Nobody has ever done it. That is why the editor's task of selecting stories for the pictures which will please the public is largely a game of chance. The margin of obscurity is immense, at best.

But this must not deter us from analyzing human responses as far as can be done in the psychologist's laboratory. We shall soon be inspecting the emotions and measuring their relative strength and pleasure values. What we find out about them will aid us in understanding the ever shifting kaleidoscope of transient likes and dislikes. But no study of the typical human organism alone will ever disclose the trend of vogues. To learn this, we must analyze the total environment of man. And that is impossible.

CHAPTER III

THE BUYER'S PROBLEMS

Buying a story for motion picture production is a serious business. Contrast it with other forms of story buying and you will readily perceive some vital differences—above all, the matter of cost.

A magazine editor buys a story and publishes it. He pays, let us say, $500 for the manuscript; then he must pay for printing and distributing. If his magazine is a going concern, a few pages of advertising, contracted for far in advance, pay the entire expenses of bringing out the story.

A book publisher brings out a novel. He pays nothing down, but grants royalties on sales after publication; so his outlay is limited to printing and distribution, including advertising. He is worse off than the magazine editor, so far as cash investment goes; for he has to invest between $4,000 and $10,000 before he begins to get returns.

A play producer on Broadway is somewhat more deeply involved. He must usually lay out between $10,000 and $25,000 before the box office opens and money flows back to him. And he may have to spend two or three times as much on certain types of plays which require expensive stage sets and high salaried stars.

How stands it with the picture company? Well, the very cheapest five or six reel job, barring the lowest trash

of stereotyped slapstick and wild western melodrama, costs from $40,000 to $60,000, including selling costs, which amount to one-third of the total, or thereabouts. Lucky the producer who holds himself down to these figures! The run of fairly good pictures costs between $125,000 and $250,000 before the public gets its first glance at them. And many a picture has cost upwards of $500,000.

Gentle author, pause to weigh the significance of this. When you invite a producer to put your story on the screen, you are asking him to invest a small fortune in your bright idea. If the brain child you leave on his doorstep becomes a success, all well and good; if it turns out to be a flop, you still have the cash the producer paid you for it, but the producer loses the small fortune.

Here you come upon the fundamental explanation of the excessive conservatism of story editors in Hollywood. Scorn them as much as you like for their timidity in tackling something novel; the fact remains that they must stick pretty closely to "sure fire stuff," or else go under. A magazine editor can afford to be ten times more daring with stories than the picture producer can. For he stakes so little on each throw.

Over and above the production cost looms the problem of fitting the story to the actors and actresses whom the company has under contract. Then there is the problem of possible duplication of a story being brought out by some other company. Add to all these worries the fitness of the story for sound pictures, both in dialogue and in incidental sounds, and the producer is well stocked with nightmares. Lest you suspect these are mere generalities, which producers hand out to writers by way of over-

awing them, let us look at concrete cases arising inside the studios.

Consider first the stars and other players under contract to the company for which the story is to be written. A scenario may be judged excellent by a scenario department. But the chances are heavily against its purchase, unless its theme and characterizations fit the contract players on the lot. Usually, the sales office of the producing company makes out a program for the coming year, which calls for so many pictures from each of the stars. The minor players can be fitted in as expediency dictates. But the stars must be given unique stories to bring out and enhance their peculiar personal characteristics.

Clara Bow, for example, is known everywhere as a "wild party girl." So her program calls for many pictures of this type. Yet, a story for her should not be too close an imitation of the leading character in *The Wild Party*. It should carry out the theme and general characteristics of the Bow personality in some original fashion.

In *The Wild Party,* Miss Bow appeared as a wild college girl who finally succeeded in making her professor fall in love with her, against his will. Now, another story placing Miss Bow in college and having her fall in love with a professor would not be acceptable, in all probability. Place the leading character, therefore, in some other situation. Have a wild young society girl, whose auto breaks down in the country. Have her picked up, perhaps, by a handsome young farmer. Have him resist the girl's charms, until finally, by various "wild girl" stunts, she compels him to fall in love with and marry her.

Preserve the personality traits and change the social setting.

John Boles made a great hit in *The Desert Song,* a light opera which ran successfully on Broadway. Original stories submitted for him should not again make him either a sheik or an Englishman disguised as an Arab leader, since these characterizations appeared in *The Desert Song*. Some story, however, which carried out the same idea for John Boles in another setting, with some new twist to the story plot, would probably have an excellent chance of being accepted.[1]

There are many considerations which enter into the preparation of a story for the screen. Let us suppose that an original story is submitted, in the usual manner, to a picture company. The story department assigns the manuscript to a reader. The reader makes a synopsis of the story, usually not more than two or three pages in length. At the end of this synopsis, the reader customarily puts a brief paragraph of opinion concerning the merits of or objections to this particular story for picture purposes. This synopsis, with the reader's comments, comes to the desk of the story editor, who then, in one of the regular editorial conferences, takes up the question of its purchase and production.

NOTES FROM AN EDITOR'S CONFERENCE

Why are stories rejected? The best answer to this question will be found in the minutes of an editorial con-

[1] As this book goes to press, a story of this type, *Rio Rita,* with John Boles, is making a tremendous box-office success.

ference. Most motion picture companies hold such conferences more or less frequently. Were it not unkind, we should like to print here a pretty full outline of the stories which are rejected. This being impossible, however, we shall attempt the next best thing, which is to indicate very briefly the essential defects which editors have pointed out in them.

Let us begin with a well-written novel which portrays with great vividness and accuracy the rise and fall of a famous motion picture actress. In the early chapters, we see our heroine as a young girl endowed with unusual talents and a very wild spirit. Everybody likes her. She clowns her way through life. She lives on excitement. After several very hard years full of defeats and disillusionments, she finally comes under the eye of a director who appreciates her unusual abilities. In short order she becomes rich and famous.

But she proves to be one of the millions who cannot stand prosperity. As soon as she earns $2,500 a week, she begins spending $3,000 a week. Forever in debt, she is pursued by creditors. Her reputation falls away from her like a rag. She becomes morbid, takes to drink, and then to drugs, and reaches the verge of insanity. The big companies drop her. She passes once more into the impenetrable obscurity of the average woman.

This story was rejected for reasons which have nothing at all to do with its literary and artistic merit. The trouble with it is that it paints the darkest side of Hollywood a little darker than it really is. The motion picture industry has often been attacked by would-be reformers who love to seize upon any evidence, however flimsy, that will justify them in setting up severe censorships. This

picture might play into their fanatical hands. So the industry, merely as a matter of self-protection, properly keeps a story like this off the screen.

We now come to a story which has been rejected by several companies which produce only high-grade features. It will almost certainly be accepted by another company which goes in for a light type of two-reel comedy. Here we see a popular college student who has entered his play in a college contest against a hated rival. The president of the college faces a student strike because of the fight he is putting up against gambling among the students. The president's own son owes the villain a large gambling debt and is frightened lest his father discover it. Our hero comes to the rescue of the president's son by giving him a check to cover the gambling debt, whereupon the villain, who has seen this transaction, demands that our hero be barred from the play contest because he has been bribing the president's son, who is a member of the prize committee. Our hero dares not tell why he paid the check. His silence justifies the committee in expelling him. The president hears of this and is about to expel the youth from college when, lo and behold, the president's niece comes along in the rôle of agent for a large theatrical producer. She establishes the hero's innocence and—could you guess it?—marries him.

Obviously, there is not enough to this, either in the form of character or complication, to make a big story. But, if supported by light, snappy music, it might work out moderately well in the simpler, frothier, and shorter type of picture.

Next, we encounter a story about a group of actors who are playing *Othello*. The actor who takes the part of

Othello has a lovely wife, with whom another member of the company is secretly in love. As the story develops, the husband eventually discovers this situation. His wife is playing the part of Desdemona. As they come to the act where Othello seizes Desdemona by the throat, the husband, insane with jealousy, actually strangles his wife. The audience thinks it is simply remarkably fine acting and applauds wildly. The curtain is rung up, and Othello takes his bow, while his wife lies dead on the stage.

As this story is written, it is a very powerful drama. In one company it was rejected simply because it is so terribly grim. Few motion picture fans like anything as horrible as this. Most of us go to the movies for entertainment and relaxation. This story offers neither. It is a fine piece of work, but misconceived as a commercial venture.

Some editors might reasonably object to the story for still another reason. It lacks essential originality, in spite of its rugged dramatic ending. One of the oldest tricks in the dramatic game is that of placing real-life drama in a parallel situation on the stage, and solving both the dramatic and the real-life complication in the action of the play.

Our next story is a magnificent picture of old Spain. It is a fairly original variation of the *Carmen* story, with two magnificent scenes at a bull fight. Everybody who read the story liked it immensely. But a previous estimate of the cost of producing it brought out the fact that more than $500,000 would have to be put into it in order to screen it properly. It contained many musical passages which could be appropriately rendered only by a

large number of highly competent performers. If produced in a Hollywood studio, the cost of sets would run very high. And if produced in Madrid or Havana, the expense would still be prohibitive. In the opinion of the editors, the story was not great enough in its appeal to justify risking such a huge sum of money.

Three excellent stories were all turned down in quick succession for no other reason than the fact that they depicted the underworld of Chicago, a grim prison scene or two, and the minute details of an ingenious burglary. Two issues were involved here. In the first place, the public, in the autumn of 1929, is pretty well fed up on stories of crime and the underworld. It wants a change. In the second place, the detail with which the successful consummation of burglary was presented is considered contrary to the public policy, as you will notice in the censor's regulations in Chapter IV.

Next on the list of the doomed comes a story described by its own author as "a picture of modern youth in its innocent quest for sensation in the dance, in liquor, and in petting parties." In it, everybody gets drunk as often as possible; men, women, and children lie around on the floor in bathing suits, and a highly artificial moral ending is tacked on. It is a significant fact that this story was not rejected by the editors because it was badly handled, but rather because it was insufferably dull and old-fashioned. Stories of the jazz age are hopelessly out of date. The jazz age, in its original virile characteristics, is no more. It came with the War, and it was gone in or about 1926, when even young people themselves became bored to death with it. The younger generation, namely, boys and girls who had been mere babes in arms during

the War, were either indifferent to it or thoroughly disgusted. It lacked the peculiar values which it genuinely possessed for older people who went through the horrors of war and had to find extravagant relief or else go mad.

The next victim of the editor's hostility is a story about a white man who wakes up one morning in a cheap little hotel on an island in the South Seas, finding that he has been drugged and robbed by some men on board the boat which brought him to the port. The hotel is run by a mother and daughter. The latter has run away from her husband, who was one of the men who robbed our hero. The hero lives with this girl for quite a while, until a half-caste damsel comes to work for them and discovering that hero and heroine are not married, decides to capture the hero for herself. Then develops, somewhat briefly, a very intense South Sea Island triangle.

At this stage of the proceedings, a long series of wild adventures has begun, in which one of the women is captured and carried off by islanders. The hero and the other woman set out in pursuit to rescue her.

This story has two weaknesses, one of which is that the public has already had too many South Sea Island stories. The other difficulty lies in the plot itself. The first half of the action turns entirely around the highly erotic schemes of the half-caste woman to capture the man. This appeals to one very large audience. The second half of the action is almost entirely adventure, full of hunts, mysterious hiding places, savage tribes, storms at sea, and several attempted murders. This interests a wholly different audience. If the two halves were woven together carefully into a unified whole, this double appeal would prove advantageous. But the author

has not succeeded in this difficult task. So the structure, as a whole, falls to pieces.

An actual account of another series of conferences on an original story may prove amusing as well as instructive. A certain producer had bought an original story because of a single idea which appealed to him in the script. The story was given to two of the staff writers to adapt for the screen. These writers wrote a new story of their own, based on the original idea of the first script. It concerned a murder by a giant ape, and the horror which this huge animal caused whenever it made an appearance.

The two staff writers opened the revised story after the murder had been consummated. They continued the plot development by having a detective, three weeks later, assemble all the people concerned with the murder and question them about it. During this questioning and cross-examination by the detective, the original facts of the murder were brought out. The staff writers then added a comedy element, based on the grotesque and unnatural appearance of the ape, and comedy situations resulting from the effect of this appearance upon other characters in the story. When their story was complete, it was given to the producer.

The producer read this revised version, and instantly perceived that the picture would be very flat and without drama or climax. Comedy and horror were alternated and intermingled in such a way as to neutralize each other. So he called in a free lance writer from outside, and told him to confer with the two staff writers and to give them suggestions, for which the staff writers would receive screen credit. For two days the free lance writer

sat with the staff writers without being able to get in a single word. They refused to accept any of his suggestions, and talked long and loud to drown him out. He went back to the producer, who said that another conference would be arranged, meanwhile instructing the free lance writer to make his suggestions in writing to the producer.

The outside writer suggested that the story open with a horror scene depicting the murder. He further suggested that the horror element, and suspense as to the unknown murderer, should be piled up cumulatively through the first third of the picture, giving appropriate action to produce this effect. He then suggested that the comedy element be introduced as an exposé of a previously unidentified horror—the gigantic ape—and that the remainder of the picture should consist of comedy and of the working out of the human elements in the plot.

This was a radical departure from either the original story or the adaptation made by the two staff writers. The producer called a conference, at which the staff writers, the free lance writer, the director, and the producer were to discuss the matter. The staff writers again prevented the free lance writer from talking. But at last the producer turned to the director and asked him how he thought the story should open. The director said, "I'll tell you how it should open," and then gave almost verbatim the suggestion of the free lance writer. This gentleman thereupon spoke up vehemently, stating that that was his own suggestion which he had tried in vain to give the staff writers for two days. The producer smiled and said, "Oh, yes! I gave your report to the

director this morning before this conference." Thereupon the two staff writers were taken off the story, and the director was left in charge, with the free lance writer, of the amended story.

After another set of conferences with the producer, in which the last part of the story was again totally changed, the picture went into production. The director, once he believed himself in full charge of the situation, again altered the story, and added, to the end of the picture, 1,100 feet of a new story which he himself originated. When the producer discovered this change, he took the director off the picture and put in another director, who finished the picture approximately as decided upon prior to production, under the supervision of the free lance writer. The author of the original story saw the resulting picture and failed to recognize in it any element of his own.

Had this original writer taken into consideration the practical necessities of screen production and the picture values required in his story, he might easily have prepared the story, in the first place, so that it never would have been given to the staff writers to adapt. It would then have been put into continuity form by a continuity writer working with the director. Undoubtedly, the original story would have been preserved in all its essential details, and the picture would have been shot in perhaps one-third the time and at half the expense.

Let us take another example of the opposite extreme in story writing. A well-known Hollywood writer was called in by the general manager of a certain studio and was asked to write a story containing certain specified elements of story, plot, and sets adapted to that par-

ticular studio, its players, and its program requirements. One of these elements was a South Sea set, another was a prim New England girl, a third was some sort of orchestral music and song numbers, a fourth was an elaborate cabaret set which happened to be available, and so on. There was no logical story connection whatever among any of the elements which had to be combined to make this picture. The experienced Hollywood writer set to work at once. In less than a week he had a story outlined by scenes, as suggested above, which met the producer's approval. Without a single conference, this story was put into finished continuity form, and a director was called in and ordered to make the picture exactly as outlined in the continuity. The picture was completed at a cost of about $265,000. It quickly grossed over $1,000,000. The writer saw on the screen precisely what he had written, without even a change of title.

The moral of all this, so far as story writers are concerned, is that the more the practical requirements are considered by the writer before the story is turned in, the more valuable the story is to the studio, and the more artistic unity will be carried from the story into the finished picture.

Here are a few of the problems which a story may have to face in the studio conferences before it is finally accepted for production. First of all, the cost of production must be estimated. This is a very serious item in accepting or rejecting a given story. If a story is seriously considered, it may be sent at once to the production manager, who is required to estimate the cost of sets,

cast, and all the other factors necessary for screening this particular story.

The question of sets inevitably comes up for discussion at the studio in considering all stories for pictures. Hollywood writers have considerable advantage here, for they know what sets are available for immediate use with little or no additional expense. We have attempted in this volume to make a rough survey of the more notable sets existing on the lots of the larger production companies in and around Hollywood. The results of this survey you will find in Appendix II.

Suppose, for example, that an Alpine village set exists on the studio lot at the Universal Pictures studio. A story which places its characters in the Alps would have a decided advantage over other stories of equal merit for this particular studio, for the existing set could be used to film the story. This fact would put what is called a great deal of "production value" into the picture, without costing the company a cent. Originally, the Alpine set may have cost $250,000 to build. Its cost of construction, however, would have been entirely marked off against the first picture in which the set was used. Thereafter, according to current Hollywood bookkeeping, the use of this particular set in subsequent pictures would be a bonanza, or a free gift to subsequent picture productions. Moreover, the same set may be photographed from a number of different angles in different pictures, so that not even the camera man himself can identify the same set differently photographed for different pictures.

If a story necessitates the cast going out on location, the estimated expense begins to look prohibitive at once. Railway fare and transportation of cameras and other

apparatus, especially the sound-recording materials, are extremely expensive. Moreover, the entire company, when on location, may have to be maintained for a long time in the chosen locale before actual shots can be made. In one picture, a production cost of $250,000 was marked up against it before a single usable shot was made. Several locations were tried, and the whole company was transported about from place to place, only to find each time that the conditions were not favorable for picture taking. In preparing stories, therefore, the author should always bear in mind the possible cost of going out on location. If the locations can be found in or near Hollywood, this item is not serious. Scenes can be prepared by studio technicians before the cast is moved to the location selected. And if any good location proves undesirable, the only wasted expense is that of preliminary construction and testing of the set.

A story so planned that the company appearing in it need not go on location has an even greater advantage. Writers should remember that such locales as department stores, summer hotels, and even luxurious country homes can be obtained for long shots, usually with little or no extra expense. Cameras can be taken into department stores, houses, etc., by a special arrangement with the owners, and long-range pictures can be taken of these locales just as they exist. Then a set representing a small part of the department store or home can be built on the studio lot. These sets are usually built inside a sound-proof building, called a "sound stage." The company can then make the picture, using the studio set, and the resulting scenes can be combined with the long shots of the actual locale in such a way that the final picture

will appear to have been made, in its entire sequence, on the magnificent private estate or in the busy department store. As a matter of fact, of course, long shots may have been taken several weeks or months before the pictures taken on the studio lots.

Production companies customarily carry what are called "stock shots" of parades, festivals, beach carnivals, fires, and any other pictures which may promise to be of use in later picture dramas. These stock shots are filed away in the film libraries of the various companies. The negatives may be taken out, and prints made as needed for any future picture production where the events originally photographed might fit in and add production value to pictures.

The stage must pass, except as a rehearsal spot for companies preparing sound pictures. This sounds much more dolorous than it is. Indeed, we may witness a curious back-handed elevation of the stage as a result of our subordinating it to the new art. It will be economics, and not the ideals of high-brow reformers, that will bring that to pass.

Here is the situation in a nutshell. Under the old conditions of the theater, it was unsafe to hazard much more than $10,000 or $15,000 on an ordinary play; and, so far as the demands of the theatergoers went, some such sum could generally be counted on to produce satisfactory results. Contrast to this the enterprise of producing an ordinary motion picture. Here the cost rarely falls below $50,000, while many large companies flatter themselves if they can keep the average expense down to $125,000. "Super" pictures cost from one to three



THE STAGE IS SET

A view of a picture being produced. The Duncan Sisters are standing in the left foreground. Notice the battery of lights and cameras, and the superstructure offstage. (Courtesy of Metro-Goldwyn-Mayer.)



A BARRAGE OF CAMERAS AND TALKIE EQUIPMENT RECORDING CHORUS NUMBERS

(Courtesy of First National.)

million dollars. On this basis, you see, finer actors, more gorgeous sets, and more drill in rehearsals can be afforded.

Now, one of the meanest factors to contend with in sound pictures is the frightful cost of recording during rehearsals. The more ingenious directors, such as Herbert Brenon, avoid this in large measure by the use of "skeleton sets." He tried these out first on the sound-picture version of Fanny Hurst's *Lummox*. Odds and ends of stock furniture, stairs, doors, and other properties were arranged on the studio floor, with tags attached to them, indicating what they represented in the story. The players were then drilled in their parts, until speech and movements were as perfect as possible under these conditions. Then, and only then, did the shooting begin. But, no matter how cleverly actors are drilled and camera men instructed, nothing less than a full rehearsal can bring to light the precise effects, good and bad alike.

Suppose, however, that a sound picture can be first put on the ordinary stage. Suppose that the director is the very one who will later have full charge of the same story in sound pictures. Suppose that the players on the stage are identical with the picture cast. A thousand and one niceties of act and speech can be tested out on the stage, *while the audience pays the costs*. The play need not show a dollar of profit on Broadway, in order to benefit the producer and director greatly.

The producer usually fears to bring out a picture which has no American characters in the leading rôles. They insist that exhibitors will not take such pictures. In this they may be right, of course; the testimony of the

sales department should be conclusive here. But if it is true, it simply indicates the dullness of the average theater owner. True, no average American audience wants to see many pictures of foreign heroes and villains; but a few fine ones will go very well.

Exhibitors and their audiences often fail to agree. Look at the case of Maurice Chevalier, that brilliant and charming French actor and singer, who lately appeared in *The Innocents of Paris.* Theater owners in small towns looked askance at this picture. They pointed out that is was full of French songs, that the leading character talked English with a marked French accent, and that the story was so essentially Parisian that some of the main features of it could not be appreciated unless one knew Frenchmen and their customs. It was freely predicted that Chevalier and his picture would prove a total failure before American audiences. Nevertheless, we have watched audiences react to *The Innocents of Paris,* and rarely have we witnessed such hilarity and all-around satisfaction. The interpolated songs, sung in French, did not seem to disturb anybody. Chevalier's personal charm, as well as the excellent acting of his company, won everybody's heart, and the producer reengaged him. Here is an instance where theory and some supposedly obvious principles failed to work out in practice.

You can see, then, how important it is to build your story right, down to the finest detail; more important than in magazine stories or plays for the stage. Why? Chiefly because of the great cost and trouble to alter a sound picture after it has been made. The music is made to fit

the entire movement, and of course all the talk must run on with the acts of the talkers. Try to change the conversation, and you must change the entire action as well. Attempt dropping a short passage, and you will be compelled to alter the musical record for a considerable distance before and after the deletion.

Millions of dollars have been, and are still being, lost in Hollywood by producers who persist in following the old technique of the silent screen. In one case that came to our notice, the director worked on an uncompleted story until he was more than half through it; then he found that a dramatic situation in the fourth reel was rather silly and would have to be rebuilt. New ideas had to be brought in, and new words to express them. Some of these referred to things spoken of in earlier reels, so the latter had to be tinkered with. In the end, virtually the entire picture had to be remade. The loss ran far into the tens of thousands.

The moral is plain enough. You story writers must furnish more finely finished work than ever before. You will find it much harder than dashing off the old silent scripts or magazine stories. The less competent workers will drop out. The survivors will be able to demand higher prices for their products, and the quality of the art will improve accordingly.

Unfortunately, the problem of selling stories to the moving picture companies is complicated. The larger companies have had many embarrassing experiences with unknown authors who have sent in scripts to them. These scripts have been accepted and produced, only to prove shabby plagiarisms, either innocent or intentional, of

well-known stories. The volume of fiction and drama to-day is so enormous that no story editor can keep track of it all. Because this exposes him to many practical and legal difficulties, the rule has long been in force against considering unsolicited manuscripts.

This forces the author to pursue one of three courses. In the first place, he may place his stories in the hands of an agent who has already established favorable connections with the Hollywood studios. Secondly, he can sell his stories in literary form to some magazines, or bring them out in book form, sending the published material to the story editors, who may then be trusted to give it fair consideration. In the third place, he may establish some personal connection with an important executive in one of the companies. This man will be in a position to vouch for the writer's integrity, thereby opening the door for him in other studios.

Unless you can submit your story in its published form, send it in typewritten on letter-size paper. Do not submit a synopsis. One does not have to sit long in an editor's chair before learning how very hard it is to judge a story in this abbreviated form. When the script deals primarily with a somewhat odd complication or adventure, the task is relatively simple. But when the author endeavors to convey a minute account of some character, nothing short of that account itself will reveal its merits.

And finally, don't get discouraged. Remember that one hundred million people in these United States go to the movies every week of the year. Every producer is as eager to buy a good story as you are to sell one. The task of entertaining these millions is nothing short of stupendous. And the average movie patron would rather

have many stories of mediocre quality than a few of high quality. This does not mean that you should lower your own standard of writing for sound pictures. But at least it should make you take a rejection slip less seriously.

CHAPTER IV

WHAT THE CENSORS DO TO YOUR STORY

In preparing scenarios, you will save yourself needless effort if you will keep in mind the basic censorship regulations of the key states of the country. The territories which these states represent are extremely rich fields for the moving picture, and production companies make every effort to accede to their censorship rules.

Unfortunately, the censors are reluctant to publish their rulings. The best that we can do, therefore, is to list a few hundred of the more important decisions which have lately been made in connection with pictures. Our list makes no pretense of being complete; still less is it official. But it embraces instances enough to educate you in the difficult art of taking all the hurdles set up by common sense and uncommon nonsense. Some of the rulings are obvious, while others must amaze you.

BRUTALITY AND GRUESOMENESS

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
ANIMALS						
1. Scene showing animal has been cruelly treated, if mistreatment is not shown, or if animal is not shown as suffering.....	OK [1]	OUT [2]	D.A.[3]	OK	OK	OK
2. Same action done by title, *i.e.*, "That dog belongs to me—I'll kill him if I want to".....	OK	OK	D.A.	OK	OK	OK
BRANDING, ETC.						
1. Title showing person is to be branded		OUT	Horror OUT	OK [4]	OUT	OUT
2. Scene showing branding iron in fire, if application of it is not shown	OK	OK	OUT	OK	OUT	OUT

[1] Action or title referred to will pass censor. [2] Action or title referred to not allowed.
[3] Depends on action. Action or title must be carefully handled in order to pass censor.
[4] Handle short pictures here very carefully.

BRUTALITY AND GRUESOMENESS—*continued*

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
BRANDING, ETC.—*continued*						
3. Long shot of branding so photographed as not to show victim's horror	OUT	D.A.	OUT	OK Horrors OUT	OUT	OUT
4. Title referring to a person as having been branded	OK	D.A.	OUT	D.A.	OUT	OUT
5. Process of tattooing, if no portrayal of pain and the tattooing shown is not vulgar	OK with exceptions	D.A.	OUT	D.A.	OUT	OUT
MASKS						
1. Scene of person wearing mask, if this is not done for purpose of robbery	OK	OK	OUT	OK	OK	OK
2. Same scene, if mask is worn for purpose of robbery	OUT D.A.	Try to take out	OUT	OK	OK	OK

3. Scene showing persons disguising their features in any other manners, as with mud, etc.	OK	OK	OUT	OK	OK	OK
4. Scene showing person blindfolded, especially if done with evil intent	Long shot OK	OK	OUT	OK	OK	OK
SUICIDE						
1. Title indicating person has committed suicide	OK	OK	OK	OK	If not gruesome	OK
2. If it is known by title or action that a person contemplates suicide; scene showing person committing act	OUT	OK if not gruesome	OK	OK	OK	OK
a. Scene showing drinking from bottle, if contents are not known	D.A.	OK	OK	OK	OK	OK
b. Scene showing turning on gas, if person is not shown after death	OUT	OK if not gruesome	OK	OK	OUT	OK

BRUTALITY AND GRUESOMENESS—*continued*

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
SUICIDE—*continued*						
c. Scene showing person handling weapon without applying it to himself, with later scene showing that he has committed suicide, if scene is not gruesome	OK	OK	OK	OK	D.A.	D.A.
d. Scene showing person at edge of cliff, if he is not shown jumping, followed by scene showing him at bottom of cliff	OK	OK	OK	OK	D.A.	D.A.
e. Scene showing person jumping, in long shot...	OUT	OK	OK	OK	D.A.	D.A.
3. Avoiding punishment by law by committing suicide:						
a. Reference by title.....	D.A.	OK	OK	D.A.	D.A.	D.A.
b. Action	Depends on story	OK	OK			

CAPITAL PUNISHMENT, HANGING, ETC.						
1. Proclamation scene which refers to shooting of spies without trial:						
a. Long shot	OK	OK		OK	OK	OK
b. Medium shot	OUT	OK	D.A.	OK	OK	OK
c. Close up	OUT	OK		OK	OK	OK
2. Scene showing views of noose, if not shown in connection with person to be hanged:						
a. Long shot	OK	D.A	OK if not gruesome	OK	OK	OK
c. Close up				OK	OK	OK
b. Medium shot	D.A.			OK	OK	OK
3. Scene showing noose in connection with person to be hanged, as showing noose being placed over head, etc.						
a. If hanging does not take place	OK	OUT	D.A.	OUT	OK	OK
b. If hanging does take place	OUT	OUT		OUT	Long shot	Long shot

BRUTALITY AND GRUESOMENESS—*continued*

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
CAPITAL PUNISHMENT, ETC.—*cont'd*						
4. Scene showing person hanged, if a long shot	OUT D.A. and story	OUT	D.A.	OUT	OUT	OUT
5. Title referring to hanging	OK	OK	D.A.	OK	OK	OK
6. Scenes showing electric chair unoccupied—long shot	OK	D.A.	D.A.	OK	OK	OK
7. Scenes showing electric chair occupied	OUT	OUT	D.A.	OUT	OUT	OUT
8. Scene showing placing of death cap	OUT	OUT	D.A.	OUT	OUT, also straps	OUT
9. March from death cell to green door	OUT	If walking, not dragged on sagging knees	D.A.	OUT if gruesome	OK	OUT
10. Title referring to person being executed, as "When does the execution take place?" etc.	OK	OK	D.A.	OK	OK	OK

11. Scene showing firing squad pointing guns, if person about to be killed is not shown in same scene	OK	OK	D.A.	OK	OK	OK
12. Scene showing person to be killed, if firing squad is not shown	OK	OK	D.A.	OK	OK	OK
13. Scene showing signal for execution	D.A. and story	OUT	D.A.	OK	OK	OK
14. Long shot of scaffold, if persons are not shown in same scene	OK	Building of it OK Finished scaffold OUT	D.A.	OK	OK	OK
15. Long shot of coffin indicating that execution is to take place	OK	OK	D.A.	OK	OUT	OUT
16. Scene of death wagon either before or after execution	OK	OK	D.A.	OK	OK	OK

BRUTALITY AND GRUESOMENESS—*continued*

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
CAPITAL PUNISHMENT, ETC.—*cont'd*						
17. Title or action showing condemned person occupies death cell	OK	OK	D.A.	OK	OK	OK
18. Scene of priest absolving condemned person if not accompanied by title	OK	OK	D.A.	OK	OK	OK
19. Title reference to third degree methods	D.A.	OK	D.A.	OK	OK	OK
20. Scenes showing third degree	OK No physical. Perhaps mental if not too strong.	OK	D.A.	OK	OK	OK
21. Titles referring to lynching	D.A. and story	OUT also all scenes	D.A.	OUT maybe in western	OUT	OUT

Except in Virginia, censorship regulations do not permit the showing of scenes in moving pictures revealing deliberate intent to commit arson. Titles showing this intent are censored in all states but Virginia, where they are allowed, and New York, where the titles must be carefully worded, and where the regulation depends on the story action.

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
ARSON: *see general note above*						
1. Scene of persons burning:						
a. Medium shot	OUT	OK if not	OUT	OK	OUT	OUT
b. Long shot	OK	gruesome	OUT	OK	OUT	OUT
2. Reference to gasoline, matches, torches, etc., for purpose of committing arson	OK	OUT	OUT	OK	OUT	OUT
BLACKMAIL						
1. Blackmail indicated by letter shown but not readable.....	OK	OK	D.A.	OK	Careful	OK
2. Blackmail indicated by letter which can be read by audience	D.A.	OK	D.A.	OK	Careful	D.A.
3. Blackmail indicated by title..	D.A.	OK	D.A.	OK	Careful	D.A.

CRIME—*continued*

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
SLAVERY						
1. Scene indicating persons to be sold, if actual selling is not shown	OK	OK	D.A.	D.A.	Careful	D.A.
2. Scene of persons on auction block	D.A.	OK	D.A.	D.A.	Chains OK	D.A.
3. Miscegenation:						
a. Reference by title	OK Black OUT Others depend on story	OK [5]	Black OUT	D.A.	OUT	D.A.
b. Action	OUT	OK	Half-castes, Chinese OUT			
THEFT						
1. Portrayal of theft	OUT	D.A.	All technique, OUT	OK	OK without technique	OK without technique

[5] If neither is black and girl is half-caste.

2. Reference by title	OK	D.A.	OUT	OK	OK	OK
3. In no state may a scene be shown in which license plate numbers are disguised.						
4. In no state, with the exception of New York, may a title reference be made to the changing of a license plate.						
DANGEROUS WEAPONS						
1. Close-up of gun pointed at camera, if not being fired....	OUT	OUT if gruesome	Hands of police, OK Crowd, OUT	OK	OUT	OUT
2. Close-up of gun being fired..	OUT	OK	As above	OK	OK	OK
3. Scene showing firing of gun if person fired at is not in frame	Side only D.A.	OK	As above	D.A.	OK	OK
4. Scene (not gruesome) of person shot, when person shooting is not shown in same frame	OK	OK	As above	D.A.	Not in back	Not in back

CRIME—*continued*

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
DANGEROUS WEAPONS—*continued*						
5. Scene showing machine guns in action, if persons fired at are not shown in same frame	OUT unless operated by officials of law	As in N.Y.	Hands of police, OK Crowd OUT	D.A.	If by police	If by police
6. Close-up of barrel of gun....	D.A.	OK	As above	D.A.	D.A.	D.A.
7. If known that knife, dagger, etc., to be used in killing; scene showing knife being thrown, or after thrown, if not seen actually striking victim..	OK	OK	As above	D.A.	D.A.	D.A.
8. Scene of hand grenades being thrown	War pictures only	OK hands of law	As above	D.A.	D.A.	D.A.
9. Titles referring to shooting: "When I give the signal, open up on them," etc.	D.A. and story	OUT	As above	D.A.	D.A.	D.A.

10. Blackjacks	OK but do not *use* police	See *Machine guns*	As above	D.A.	D.A.	D.A.
BOMBS						
1. Reference by title to bombing	D.A.	OUT	OUT	Depends on title	Depends on title	Depends on title
2. View of bomb if not being lighted:						
a. Long shot	OK	D.A.	Hands police, OK Crowds OUT	D.A.	Not if you show how it is done	Not if you show how it is done
b. Medium shot	OUT					
c. Close-up	OUT					
3. View of bomb being lighted..	OUT	D.A.	As above	D.A.	As above	As above
4. Face of clock shown to indicate time an infernal machine is set to go off.....	OK	D.A.	As above	D.A.	As above	As above
5. Scene showing throwing of bomb	War pictures only	D.A.	As above	D.A.	As above	As above
6. Title such as, "It's dynamite. There's enough to blow up the whole town," if there is no deliberate intent to cause explosion	OK	D.A.	OUT	D.A.	D.A.	D.A.

CRIME—*continued*

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
BOMBS—*continued*						
7. Scene showing receptacle with word *Dynamite, Gun Powder,* etc.	D.A. and story	D.A.	D.A.	D.A.	D.A.	D.A.
8. Scene of actual explosion	OK and story	D.A.	D.A.	D.A.	Not if you show how it is done	Not if you show how it is done
KILLING OR ATTEMPT TO KILL						
1. All action in conjunction with intent to kill by asphyxiation, if actual cutting of gas pipe is not shown	OUT	D.A.	D.A.	D.A.	Not if you show how it is done	
2. Scene showing choking	Long shot OK	D.A.	D.A.	D.A.	D.A.	D.A.
3. All scenes and titles showing avoiding punishment by law must be handled with great care in order to pass all state censors.						

DEROGATORY TITLES

1. Titles including the following words, if the action is not deletable:

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
Profane words	OUT	OUT	OUT	OUT	OUT	OUT
Broad	OUT	OK [6]	OUT	OK	OK	OK
Tart	D.A.	OK [6]	OUT	OK	OK	OK
Jane	OK	OK [6]	OK	OK	OK	OK
Hussy	OUT [7]	OK	OK	OK	OK	OK
Hell-cat	OUT [7]	OK	OK	OK	OK	OK
Tom-cat	OUT [7]	OK	OK	OK	OK	OK
Trollop	OUT	OK	OK	OK	OK	OK
Nigger	OUT [8]	OUT	OUT	OUT	OUT	OUT
Chink	OUT	OUT	OUT	OUT	OK	OK
Chinaman	OK	OUT	OK	OK	OK	OK
Monkey	OK	OUT [9]	OUT	OUT	OK	OK
Liar	OK	OK [6]	OK	OUT	OK	OK
Fool	OK	OK [6]	OK	OUT	OK	OK

[6] In light comedy vein.
[7] Depending on sense and action.
[8] Depending on sense.
[9] Where word refers to race.

GAMBLING

In all states except New York, the following scenes and titles are permitted, if they advance the story and if justice prevails.

In New York, the following scenes and titles are permitted without qualification:

1. Scenes showing cards with no money and no chips, if titles indicate that money is involved.
2. Scenes showing dice-rolling, if money is not shown.

In New York, the following scenes and titles are permitted with qualifications:

1. Scenes showing gambling when chips alone are shown on the table. Here the action must be handled with great care.
2. Money may be shown on the table only if the game is not in action.
3. Chips and money may be shown on the table only if the game is not in action.
4. A roulette wheel may be shown in action, if the scene is not distinct and if the action is carefully handled.
5. A roulette wheel in action may not be shown if money is shown.
6. Unfair manipulation of gambling devices may not be shown.
7. Depending on the meaning, a title referring to "trimming" customers may be used.
8. Dice may not be rolled if money is shown.
9. Titles such as "I'll raise you five," etc., may be used, depending on the picture.
10. Titles indicating that a woman is being gambled for, if at the end of the game she is not shown going to the winner, may not be used.

GOVERNMENT

1. No titles may be shown which are derogatory to Government or to government officials.

LIQUOR

1. Scenes showing liquor, if it is not used for stimulation, are permitted by state censors.
2. In New York, no still may be shown if the process of making liquor is portrayed. Other states make only the first stipulation.
3. In New York, the words *bootleg, blind pig, rum runner,* etc., may be used depending on the action. Other states demand only the qualification stated above.
4. In New York, scenes may be shown, if they are not too close or too prolonged, which portray casks leaving a boat, if bottles are not shown, and if it is known by previous title or action that liquor is being smuggled. Other states qualify as above.

NUDITY AND EXPOSURE

1. All states forbid the showing of a person in the nude, even if done in long shot so that the body is not vulgarly exposed.
2. All states forbid the exposure of sexual organs.
3. Portraits of nude women may be shown in all states except New York and Pennsylvania. In New York, such scenes can be included in an educational picture only. In Pennsylvania, the showing of the scene depends on the action.
3. All states except Pennsylvania permit the showing of nude statues. In Pennsylvania, the showing depends on the action.
4. All states except New York and Pennsylvania permit titles regarding nudity, *e.g.*, "She's nude." "Don't come in—I am undressed," etc. In New York, these titles depend on the action and the story. In Pennsylvania, the first title may be used, but not the second.
5. All states except New York and Pennsylvania permit the showing of persons in baths, in a long shot. New York permits the showing of only head, neck, and arms. Pennsylvania insists on a cut, if possible.

POISONOUS DRUGS, ETC.

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
1. Scene showing deliberate application of poison or drug to liquid, food, etc.	OUT [4]	OUT	OK [10]	OK [10]	OK [10]	OK [10]
2. Accidental application	D.A.	OK	OK [10]	OK [10]	OK [10]	OK [10]
3. Labels on bottles, etc., showing that contents are drug or poison	OUT except for healing	OUT	OK [10]	OK [10]	OK [10]	OK [10]
4. Drinking of poison	D.A.	OK	OK [10]	OK [10]	OK [10]	OK [10]
5. Application of needle, if shown in long shot (silhouette)	OUT	OK	OK [10]	OK [10]	OK [10]	OK [10]
6. Reference by title to person being dope fiend	OK	OK	OK [10]	OK [10]	OK [10]	OK [10]
7. Opium smoking, if long shot so effects are not plainly shown	OK [11]	OUT	OK [11]	OK [11]	OK [11]	OK [11]

[10] If not referred to in title or dialogue as such.

[11] If preliminaries to smoking are not depicted.

8. Title, such as, "You hold the arm while I administer the drug," if action does not follow title. (This applies to drugs for medical purposes)..	OK	OUT	OK [10]	OK [10]	OK [10]	OK [10]

[10] If not referred to in title or dialogue as such.

[11] If preliminaries to smoking are not depicted.

SEX-SUGGESTIVE

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
BEDS AND BEDROOMS						
1. Reference by title to twin beds	OK	OUT	D.A.	D.A.	D.A.	D.A.
2. Twin beds, with one bed mussed, indicating that only one has been occupied.....	D.A.	OUT	D.A.	D.A.	D.A.	D.A.
3. Husband and wife dressing or undressing in bedroom, if not unduly exposed, merely to show intimacy	OK	OK	D.A.	D.A.	D.A.	D.A.
4. Husband and wife in bed together, if actions not suggestive	OK	OK	D.A.	OK	D.A.	D.A.
5. Scenes inferring intimacy by means of articles of clothing in room	OK	OK	D.A.	OK	D.A.	D.A.

6. Man unlocking woman's apartment or bedroom door, indicating that they are living together	OUT	OUT	D.A.	D.A.	D.A.	D.A.
7. Man and woman (married or unmarried) walking toward bedroom, indicating contemplated intimacy, if they are not shown after the door closes on them	D.A.	OUT	D.A.	D.A.	D.A.	D.A.
8. Views of bed, indicating it has been slept in	D.A.	D.A.	D.A.	D.A.	D.A.	D.A.
SEDUCTION AND RAPE						
1. Man attempting to seduce girl	Very cautious D.A.	D.A.	D.A.	D.A.	OUT	D.A.
2. Title indicating seduction, such as, "Your son betrayed and ruined her"	D.A.	D.A.	D.A.	D.A.	OUT	D.A.

SEX-SUGGESTIVE—*continued*

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
SEDUCTION AND RAPE—*continued*						
3. If actual seduction is not shown, scene showing girl's remorse, indicating she has been ruined	OK	D.A.	D.A.	D.A.	OUT	D.A.
4. Man attempting to enter girl's room, with intent to rape	OUT	D.A.	D.A.	D.A.	OUT	D.A.
5. Reference to white slavery by title	D.A.	D.A.	D.A.	D.A.	OUT	D.A.
6. Scene showing facial expression of man, indicating he contemplates seduction, if actual seduction is not shown	D.A.	D.A.	D.A.	D.A.	OUT	D.A.
7. Titles such as, "I wasn't the first one—there were others"	D.A.	D.A.	D.A.	D.A.	OUT	D.A.
INTIMACY						
1. Title referring to woman belonging to a man: "Remember, she's my property"	D.A.	D.A.	D.A.	D.A.	D.A.	D.A.

2. Titles referring to woman and man living together	D.A.	D.A.	D.A.	D.A.	D.A.	D.A.
3. Fade-outs indicating intimacy about to take place.....	D.A.	D.A.	D.A.	D.A.	D.A.	D.A.
4. Titles indicating that man pays for woman's apartment.....	OUT	D.A.	D.A.	D.A.	D.A.	D.A.
5. Titles in which man offers woman money after he has been intimate with her.....	OUT	OUT	D.A.	D.A.	D.A.	D.A.
6. Showing of money, if amount not discernible, to indicate that woman has been paid by man, if he is not shown giving her money	OUT	OUT	D.A.	D.A.	D.A.	D.A.
GOLD DIGGING						
1. Reference to woman as gold digger	D.A.	D.A.	D.A.	D.A.	OK	D.A.
2. Title indicating woman is attempting to get money from man	OUT	D.A.	D.A.	D.A.	OK	D.A.

SEX-SUGGESTIVE—*continued*

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
GOLD-DIGGING—*continued*						
3. Scenes of bills, statements, etc., indicating they are to be paid by a man	OK [12]	OUT	D.A.	D.A.	OK	D.A.
4. Reference to "Butter and Egg Man"	OK	D.A.	D.A.	D.A.	OK	D.A.
PROSTITUTES						
1. Titles such as, "She's a prostitute," "harlot," etc.	OUT	D.A.	D.A.	D.A.	OK	D.A.
"Jane"	OK	D.A.	D.A.	D.A.	OK	D.A.
2. Reference to women working in houses of prostitution	OUT	OUT	D.A.	D.A.	OK	D.A.
3. Man approaching woman on street, trying to "make" her, if they are not shown going away together	OUT	D.A.	D.A.	D.A.	OK	D.A.

[12] Long shot to be shown if indistinct and not too much stress surrounds action.

4. Views of woman soliciting....	OUT	OUT	D.A.	D.A.	OK	D.A.
5. Titles of woman soliciting....	OUT	OUT	D.A.	D.A.	OK	D.A.
6. Title indicating that a woman is a prostitute, but does not actually call her that, such as, "She's nothing but a ——"...	D.A.	D.A.	D.A.	D.A.	OK	D.A.
BABIES AND CHILDBIRTH						
1. Titles implying woman is pregnant. (Not in comedy vein)	OK if married					
2. Scenes indicating woman is suffering from labor pains....	OUT	OUT	D.A.	OUT	D.A.	D.A.
3. "I'm about to become a father," if done for comedy effect	OK if not used distastefully	OK	D.A.	D.A.	D.A.	D.A.
4. Couple looking at baby carriage, clothes, etc. (Married or unmarried)	OK	OK	D.A.	OK	D.A.	D.A.

SEX-SUGGESTIVE—*continued*

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
BABIES AND CHILDBIRTH—*continued*						
5. Titles referring to women bearing children	OK if not vulgar or distasteful	OK	D.A.	D.A.	D.A.	D.A.
6. Title referring to illegal operations	OUT	OUT	D.A.	OUT	D.A.	D.A.
7. Title referring to birth control, if not in comedy vein	Depends on reference	OUT	D.A.	D.A.	D.A.	D.A.
8. Title referring to birth control for comedy effect	OUT	OK	D.A.	OK	D.A.	D.A.
9. Actions of girl, indicating she is pregnant and contemplates illegal operation	OUT	OUT	D.A.	OUT	D.A.	D.A.
10. Fade-out of man and woman in intimate position, if there is later scene showing her with a baby, indicating they were intimate, if no titles are used	OUT	OUT	D.A.	OUT	D.A.	D.A.

11. Reference to illegitimacy, especially if it has direct bearing on story	OK if not stressed and story points wholesome moral	D.A.	D.A.	OK	D.A.	D.A.
PERVERSION						
1. Action of characters, indicating they are perverted, as scene showing women kissing each other, if shown in long shot	OUT	OUT	D.A.	OUT	D.A.	D.A.
2. Titles indicating perversion...	OUT	OUT	D.A.	OUT	D.A.	D.A.
3. The word *nance*	OUT	OUT	D.A.	OUT	D.A.	D.A.
KISSING						
1. On the neck	OK when not excessive or lustful	OUT	D.A.	D.A.	OUT	D.A.
2. On the breast	OUT	OUT	D.A.	D.A.	OUT	D.A.

SEX-SUGGESTIVE—*continued*

	N.Y.	Ohio	Pa.	Va.	Md.	Kan.
KISSING—*continued*						
3. Sensuous kissing on the body	OUT	OUT	D.A.	D.A.	OUT	D.A.
4. Forcible kissing	D.A.	D.A.	D.A.	D.A.	OUT	D.A.
5. Necking	When not excessive	D.A.	D.A.	D.A.	OUT	D.A.
6. Titles referring to kissing	OK	D.A.	D.A.	D.A.	OUT	D.A.
7. Kissing on the arm	D.A.	OUT	D.A.	D.A.	OUT	D.A.
8. Kissing on the leg	OUT	OUT	D.A.	D.A.	OUT	D.A.
9. Kissing on the foot	D.A.	OUT	D.A.	D.A.	OUT	D.A.
10. Man lying on top of woman, kissing her	OUT	OUT	D.A.	D.A.	OUT	D.A.
11. Woman lying on top of man, kissing him	OUT	OUT	D.A.	D.A.	OUT	D.A.

	N. Y.	Ohio	Pa.	Va.	Md.	Kan.
1. If shot is not accompanied by vulgar title; scene showing label on bottle, such as "Castor Oil," "Milk of Magnesia," etc.	OK	D.A.	D.A.	OUT	D.A.	D.A.
2. Scenes of baby's toilet chair	D.A.	D.A.	D.A.	OUT	D.A.	D.A.
3. Child indicating by title or action that it needs to go to the bathroom	D.A.	D.A.	D.A.	OUT	D.A.	D.A.
4. Action indicating lewd jokes are being told, if no titles are shown	D.A.	D.A.	D.A.	OUT	D.A.	D.A.
5. Kicking on posterior	D.A.	D.A.	D.A.	OUT	OK	D.A.
6. Wet mattresses	OUT	OUT	D.A.	OUT	OK	D.A.
7. Nose thumbing	OUT	OUT	D.A.	OUT	OK	D.A.

CHAPTER V

YOUR STORY

THE PLOT AND ITS CONSTRUCTION

BUILDING a plot for a sound picture is the simplest part of the whole technique. In its simplicity lies its enormous difficulty. For very few people can think simply. In this respect, plot work is the opposite of designing sets. The eye easily takes in and enjoys vast and complicated scenery that is full of many objects, forms, and colors. But when the mind endeavors to observe men in action, it usually fails to grasp the larger patterns of human behavior.

Turn to your own personal experiences with people for the most convincing proof of this fact. How many of your intimate friends do you thoroughly understand? How much of their conduct is an open book to you? How easily can you explain their motives, their emotions, and their attitudes?

Let us suppose, for argument's sake, that you do know some of your friends pretty well. What is the basis of your knowledge? The odds are a thousand to one that it is founded on a myriad of walks and talks, of impressions, of exchanges of opinion, of emotional outbursts, of quarrels, conspiracies, passions, fears, coöperations, and all the many other human relations and acts which make up the web of life. To amass all these, you have spent years.

Your insight is the fruit of those years. How, now, can you convey to strangers some of this insight, when—as in any motion picture—you have not more than thirty minutes in which to portray your friend's personality? How make him known through the medium of not more than one or two thousand words of speech—or even in five hundred words, as sometimes happens? How convince your audience that his nature is what you know it to be, when you can show him in only twelve or fourteen short acts?

Here is the deadly simplicity of plot building. It lies in the necessity of depicting men in action in such a manner that the onlookers grasp the characters and the significance of their deeds *just as clearly as if they had been watching them for years, instead of for minutes.* You, the author, must distill a lifetime into an hour. You must select episodes which reveal most flagrantly the traits of your heroes and villains. You must choose with exceeding care the phases of these same traits which enlighten the audiences most easily.

Let us now inspect very briefly your problems and methods. We shall not attempt a thorough survey, inasmuch as it has been made in earlier volumes [1] and would be too extensive to publish here. Furthermore, we are looking at the more specialized problem of the plot in sound pictures.

WHAT IS A PLOT?

What is a plot? It is a climactic series of events, each of which both determines and is determined by the char-

[1] Walter B. Pitkin, *The Art and Business of the Short Story* (Macmillan); and *How to Write Stories* (Harcourt, Brace).

acters involved. That is a definition of an ideal plot. You will search far through literature and the movies for a perfect specimen of it. But every professional writer aims at this as his target, and is usually satisfied whenever he hits any ring on it, however far from the bull's-eye.

First, look at the climactic series of events. You have such a series whenever it serves to intensify the spectator's interest progressively. This is not, strictly speaking, a definition; it is rather a method of testing. If the spectators show rising interest, you probably have your plot episodes moving toward a climax. But not necessarily so, for you may break down in the midst of the series. This is why, if you are to have a perfect climax, the rise of interest must be progressive up to the very end.

We come closer to a genuine definition when we say that, in a climactic series of events, the characters become more and more deeply involved and, at the same time, act in such a manner as to express their personalities more profoundly. This can be best illustrated by reference to series of events which lack strong climax.

Any ordinary collection of pictorial news shots lacks climax, as well as reciprocal determination. Here we have a mere jumble of episodes, each interesting in itself, perhaps, but having no bearing whatsoever upon any of the others.

The lowest form of climactic series, familiar to movie fans, is the pursuit picture. The villain steals the heroine's pearl necklace in the middle of the night, leaps to his bronco, and speeds across the mountains. The sheriff rouses his trusty band and thunders after the fleeing scoundrel. The villain's horse stumbles on a bowlder in

a cañon bottom. Off leaps the villain and mounts a wild horse that happens to be standing conveniently at hand. A cloudburst retards the sheriff's posse, so they turn and drive hastily over a couple of other mountain ranges by way of detour. Thus on and on, until the scoundrel is captured.

Contrast to this the plots in Ibsen's plays, where you find, again and again, almost perfect climax. With each successive situation, Ibsen's heroes and heroines disclose their inmost natures, as a result of their being plunged into situations that test and try them. In these predicaments, they involve themselves and others more and more deeply, until matters come to a head, crash, and are solved by some great final acts that are uniquely characteristic.

Or again, study the all-talking picture, *The Doctor's Secret,* adapted from the Barrie play, *Half an Hour.* Here is an example of perfect technique in plot construction, extraordinary characterization, and fundamental realism. For compactness of scene and action it has seldom been excelled.

The entire action takes place in half an hour. The heroine, married to a rich and unbearable husband, is about to leave the country with her lover, from his home a few blocks away from her own. He leaves to get a taxi, is run over, and is brought in dead by a passing doctor. The doctor's inquiry about her lover's relatives leads the woman to admit that she is not the dead man's wife. She is faced with three tragic alternatives: she can disappear; she can kill herself; or she can go back to her husband, who has not yet had time to discover her absence and its explanation. If she goes away alone, she

cannot take care of herself. She has no money and no way of self-support. In spite of her tragedy, the pull of life is too strong for her to commit suicide. So, in desperation, she rushes home just in time to dress for a dinner party planned for that evening. As she comes down to greet the guests, she is overwhelmed to have her husband introduce to her the doctor who had brought in her dead lover only a few minutes before. He has been telling of the recent tragedy.

The plot resolves itself around the possibility of her going through the evening, unsuspected by a jealous husband, with the only witness to the tragedy a dinner guest in her home.

Here is a perfect situation, managed by thinking and subsequent action, in which both foresight and self-control are deeply involved. Every event in the story both determines and is determined by its central character. The only coincidence—the chance passing of the doctor at the time of the tragic accident—gives rise to the story action, and is also entirely plausible. The solution shows the audience just what sort of character the heroine is. You will do well to study the picture with great care for its plot technique in a play adapted to a talking movie.

Admirable as this adaptation is, however, the picture as a whole cannot be recommended as perfect screen copy. Rather do we praise it as an almost perfect rendering of the dramatic values that were present in Barrie's original stage play. The story lacks pictorial qualities. It is somewhat too bald and bare. The camera man has too little to do here. Do not let this limitation, however, confuse your judgment of its merits.

There are two basic patterns of story. In one, the effects are produced upon us, the spectators or readers, by the *velocity* of *events*. In the other, they are produced by the *intensity* of *moments*. In the first instance, we are excited by speed, while in the second we are excited by depth. We have a vague but accurate appreciation of this distinction whenever we say of a pure action story that it is superficial. We mean that things just happen one after another; that we nowhere have a chance to pause and penetrate to the heart of any one of the events in this flux.

What we call melodrama is, in the last analysis, a story whose dominant effects are produced by velocities. All of the strength of melodrama derives from this effect, and so, too, do its weaknesses. In almost every instance we find that the people portrayed in the melodrama either have very primitive personalities or have none at all. The writer's aim being to stimulate his audience by sheer action, it follows, of necessity, that he must beware of introducing characters as complex as the average man. The average man makes a very poor figure in an action story. Endowed with many traits and crystallized into a large variety of habits, he finds that all of these tend to assert themselves, more or less, in every crisis of his life. Whatever else they accomplish, we may be sure that they retard his behavior. He stops, looks, and listens; he ponders; he recalls; he analyzes; he is held back by fears; he moves warily; he plays safe. All of which reduces the number of happenings per minute, hour, and day.

THE USE OF COINCIDENCE

There is only one right way to use coincidence in building a plot. You may use coincidence freely only in the complication that begins the story action. It is wrong to employ this device to solve a situation and the acts arising from the complication and making up the movement, climax, and solution. The reason for this is that the spectator is interested in seeing men in action. He wants to see your characters struggle to get out of the situation you have put them in. He is interested in watching them use their wits, their ingenuity, their moral integrity to escape from their troubles. And the spectator feels cheated if your men in action escape, by some lucky break, from the situation in which you have put them. For this escape does not reveal qualities of personality and character, and hence the action is neither dramatic nor characteristic.

In *The Wheel of Life* (Paramount), starring Richard Dix, you find both the right and the wrong use of coincidence. The story opens with the hero rescuing a woman who is trying to throw herself into the Thames. He takes her home, cheers her up, then goes out to get a bite to eat. When he returns, she has vanished, leaving behind a note thanking him for his kindness. Long afterwards, he returns to his army post in India; and there he meets her at the very first military ball he attends. She is the wife of his colonel. Out of this extraordinary encounter the main complications of the story develop. And here we have coincidence correctly used; for do not most of life's strange episodes arise in just that way? And are not most of our intensest struggles so born?

As the story develops, our hero, a captain whom the colonel has long befriended and come to love as a son, finds himself so powerfully attracted to the colonel's wife that he resolves to leave the regiment and seek service in the remotest frontier of India. Weeks afterward, we see him marching to the rescue of a party of white people who have rashly set out to visit an old monastery and have been ambushed by bandits. Reaching the monastery in which they have taken refuge, the captain finds the colonel's wife, the very woman he has loved and fled from. This wild chance ends the action. And badly, too. For, to solve a human problem thus is not to solve it at all, strictly speaking. Furthermore, it is too easy for the story writer and too hard for his audience.

SUSPENSE

Many writers, in their callow days, regard suspense as an indispensable factor in good plots. The mistake is natural enough, for many stories do require it. But the rule is by no means universal. You will find, now and then, excellent stories, both in magazines and on the screen, in which there is absolutely no suspense. The author tells you, in the very opening, what the outcome is going to be. And your interest centers on the ways and means of reaching that outcome.

There are two varieties of story in which suspense may be either feeble or wholly lacking: first and most important, the realistic character story whose aim is solely to depict a specimen of human nature; and second, a somewhat rare type of adventure or complication story whose aim, so far as the reader is concerned, is merely to

relate the horrors and hazards endured by the characters in some strange situation. Thus, you might write an excellent story about Commander Byrd and how some members of his party experienced Antarctic blizzards, all without concealing the final disaster or triumph of the party.

The Four Varieties of Suspense

There are, all told, just four kinds of suspense, two of them serviceable, and two of them destructive. Here they are, reduced to their lowest terms.

Two varieties of suspense are good:

1. Suspense which develops as a matter of fact in the events of the story. This we find in any ordinary mystery, such as the finding of the body of an unknown man propped up in the chair at the head of the dining table in the White House some morning.
2. Suspense which does not develop in the events themselves, as they happen, but is invented by the story-teller in order to whet the spectator's curiosity and excitement.

Two kinds of suspense are wrong:

1. Suspense resulting from the story-teller's failure to make clear a character or a situation.
2. Suspense which results from the writer's diverting the spectator to minor aspects of the main story, thereby leaving problems or mysteries unsolved.

The first of these four varieties appears in *The Canary Murder Case*. The body of a notorious dancing girl is found, strangely slain, in her own apartment. Many people are suspected of the murder. The suspense throughout the story is developed, more or less logically, around the progressive involvement of these people, right up to the identification of the criminal.

The second variety of suspense is skillfully handled in a unique pattern in the talkie, *Thru Different Eyes*. As the picture opens, newsboys are frantically shoving extras, announcing a murder, into the eager hands of passers-by. The scene then shifts to a press room, in which reporters are telephoning frenzied accounts of the trial of the murderer to their newspapers. In this way, the initial situation is revealed to the audience, which learns that a man is now on trial for the murder of his best friend. The scene later shifts to the courtroom where the trial is taking place.

Here, the author devises an ingenious method of holding the suspense and interest of the audience, and instead of developing the initial situation to one climax and a dénouement, he plots his story in such a way that there are three major climaxes, with one final dénouement. This is how he does it:

The audience is shown three successive pictures of the same murder, as three different people insist it to have taken place. The first picture shows the succession of events leading to the murder, as they are conceived by the attorney for the defense, who tells this story to the jury. The second shows the same characters in the same initial situation, but with a different series of events causing the murder, as the prosecuting attorney believes them to have taken place and so tells the jury. The scene then shifts back to the courtroom, where the judge charges the jury and later hears its verdict of "Guilty." Now, a woman who has been attending the trial rushes up to the judge, says that the defendant is not guilty, and hysterically tells her own story, which proves her to be the former mistress, and now the murderer, of the de-

fendant's best friend. The audience then sees the picture of the murder and its attendant circumstances as they actually occurred.

Look now at an unusual type of suspense story, *The Valiant*. It achieved notable success by the unique method of building the entire plot, not primarily around the events in the story, but chiefly around the stoic character of the hero. Much of the picture's success, of course, was due to the sustained and intelligent acting of Paul Muni, its leading character. But equally much was the result of an excellent plot.

As the story opens, a pistol shot is heard, and a young man is seen leaving the scene of the shooting. He walks numbly to the police station, where he tells the officer that he has just killed a man. On being asked his name, he quickly invents one. He is jailed, tried for murder, and sentenced to be executed.

Meanwhile, the scene changes, and the audience sees an old lady whose son had disappeared years back and has never been heard of since. Scenes of the youth at his old home reveal to the audience that the missing boy and the condemned murderer are the same. The mother sees a picture of the man in a newspaper, and is convinced that he is her son. She then sends her daughter, the boy's sister, to the prison to find out if the murderer is, in fact, her boy. There follows a tremendously dramatic scene between brother and sister, in which the brother successfully and tragically hides his identity and invents a plausible story about the missing youth, whom he said he knew in the army and who was killed in action. The sister leaves, convinced that at last she knows the story of her brother's fate, and that the man about to be executed

was indeed his friend. The pictures ends with the execution of the valiant brother.

Here, the suspense is built around the heroism, in concealing his identity, of the leading character, and the various situations in which he is placed where this quality is tested. The motive for the murder is never revealed, and thus the total plot situation is entirely changed and made far more difficult for successful solution. First of all, the situation is so set at the beginning that it is entirely realistic for the hero to be able to conceal his identity in all the situations in which he is placed. His mother is too old and too ill to travel. His sister was a little girl when he disappeared; she is now a young woman. When she recalls to him scenes of their childhood together, it is possible for him to assert the main characteristic around which the story is built—his valiant heroism in refusing to identify himself and in being stoic enough to spare his family the humiliation and anguish of seeing its only son go to the electric chair.

FAKE TWISTS IN PLOTTING

As we read manuscripts sent in from young writers, we are painfully impressed by their use of complications and climaxes which cannot endure the scrutiny of realistic analysis. Striving to produce the thrills of good melodrama, they invent situations which never could happen. Hoping to create a superb heroine, they make the damsel do things which no flesh and blood ever did. How easy it would be for us to wax moral and advise every reader of this book to tell the truth, the whole truth, and nothing but the truth in his stories! And yet how wrong!

For, beyond all doubt, there is a certain kind of legitimate faking in story construction. Aristotle was hot on its trail when he declared that the dramatist must not use, in his plots, events which are improbable, even though they are possible; and he should always select events which are probable, even though impossible. In other words, what decides the whole business is *the attitude of the audience and its actual response to what is presented to them.*

The impression which a story makes upon a person is always relative to his knowledge, his range of experience, his emotional habits, and his social prejudices and customs. Few of us have a very wide or deep hold upon the truth, as the scientist understands truth. Hence, mere fact does not weigh heavily in our likes and dislikes of stories. If it did, historians and biologists would rank as high in literature as Victor Hugo and Charles Dickens.

A plot, then, is good enough if it arranges people and events in a manner which convinces and pleases the typical spectator. Let me illustrate this by citing highly successful picture stories which, strictly analyzed, do not present things as they are.

Here is an illustration of fraudulent plotting and suspense used with great dramatic effect. In *Thru Different Eyes,* a man has just been pronounced guilty of the murder of his best friend. Instantly we hear a scream, and see a young woman rush up to the judge, sobbing that the accused man is innocent and that she herself committed the murder. She then tells her story. After she has made a full confession, the judge announces that in view of this confession, he believes that the verdict of the jury should be set aside.

In actual courtroom procedure, the young woman would have been rushed outside by attendants upon the first sign of disorder in the court. In the second place, even if she had reached the judge and started to tell her story, she would have been marched out of the room as soon as attendants could reach her. And finally, even if she succeeded in telling her whole story, which would be almost impossible, it would never be accepted as evidence without a single witness present to verify the confession and without regular legal procedure to admit the new witness to the witness stand.

But if movie trials plodded on as slowly as do murder trials in real life, the motion picture business would go bankrupt. And writers, knowing this, are quick to realize the dramatic effectiveness of fakes which are as vivid as this.

In *The Trial of Mary Dugan,* we find fake plotting aplenty. When the police come and find Mary Dugan sitting beside the body of the murdered man, Edgar Rice, they hear her moan over and over, "Oh, my poor Jimmy—my poor, poor Jimmy." The audience is led to suppose that this Jimmy is a man of mystery, presumably Mary Dugan's lover. Later, it turns out that Jimmy is her brother, whom she has been supporting with the money she got from her various lovers. But, in the course of the story, nothing emerges which would explain Mary's repeating her brother's name endlessly as she looked at the dead man. Jimmy was no source of trouble to her at that time, nor was anything adduced throughout the trial which would indicate that Rice's death might injure Jimmy. His name was merely lugged in to mystify the audience. The realities of the situation were ignored.

Again, when Mary Dugan's attorney, Mr. West, is cross-examining the police inspector, he asks the latter if he had inquired as to the occupants of the adjoining apartments in the building in which Rice was killed. The inspector says that he had made no such inquiry, as there seemed to be no reason for it. Thereupon Mr. West says, with an air of great triumph, "So you did not learn that I was occupying the adjoining apartment." His apparent reason was to discomfit the police inspector, and, at the moment, this appears to be quite adequate. When the trial ends, however, we discover that West himself is the murderer. Furthermore, he is an extremely clever one. Why, then, would he have called attention to his place of residence? In reality, he would not have done so. But the author of the play had to get the fact in easily and quickly because this fact had to reach Jimmy, Mary Dugan's brother, who took over the defense after West had refused to cross-examine Mrs. Rice, the widow. Furthermore, the fact had to be brought out in some vivid and dramatic fashion to produce the stage effect. It would have been rather dull to have introduced it casually.

A far subtler form of fake appears at the climax. Jimmy's one problem is to free his sister. No other issue is before the court. She is either guilty or innocent. And the judge quite properly charges the jury to this effect. Jimmy proves by cross-examining the fingerprint expert that it was Mary's right hand which left its imprint upon the handle of the knife used in the murder. He next proves most ingeniously that the knife-blow which killed Rice could not have been delivered with the right hand. The position of the wound made this impossible. As a

matter of legal evidence, his case is complete at this point. In a real courtroom, at this juncture, Jimmy would have triumphantly addressed the jury in somewhat the following strain:

"Gentlemen of the Jury: The only issue before this court is the guilt or innocence of the defendant. We have conclusively proved that it was the defendant's right hand which took hold of the knife. We have also proved that Edgar Rice could have been killed only by a blow delivered with the left hand. Therefore, the evidence showing that my client held the knife with her right hand proves absolutely nothing with regard to the murder. I demand, therefore, that she be acquitted."

Now we will all admit that this terse play of logic would make a very undramatic finish to an exciting murder mystery. It would fail, furthermore, to satisfy the curiosity of playgoers, inasmuch as it would not solve the mystery. Everybody in the audience wants to know who killed Rice. It is not enough to demonstrate Mary Dugan's innocence. Hence, the author adds to the court scene a grand melodramatic gesture which, though not strictly impossible, is assuredly improbable and, legally speaking, gratuitous. Jimmy walks several paces away from West, as West is sitting on the witness stand, then turns suddenly to him, holds up the knife, and asks him if he has ever seen it. West, looking at it, says he hasn't. Whereupon Jimmy tosses the knife to West, who catches it with his left hand. At this juncture, Mrs. Rice screams in her best melodramatic fashion. And Jimmy turns to the jury triumphantly and demands the acquittal of Mary Dugan.

Fake? Yes. But exceedingly clever!

When you have finished writing your story in its complete literary or dramatic form, go over it again and analyze it from the point of view of its picture form. Make what is called in motion picture parlance a list of sequences. A sequence is a series of scenes which are naturally collected together usually in the same or adjacent locales or sets. A sequence in a motion picture drama corresponds roughly to the act of a legitimate stage play. Sometimes an act may be split up into three, or even more, scenes. But the action and general continuity of the drama are so closely connected in these different scenes that the whole thing forms one unit act, or, in the moving picture, a sequence.

Go over your story, then, and split it up into sequences. The first sequence will, of course, introduce your characters and plant the beginnings of the plot. Under this sequence, list carefully all the essential actions and dialogue which are necessary to put over effectively the portions of the story which you decide are necessary for this sequence. Remember that, in a motion picture continuity, literary terms are useless except as they suggest visual or sound effects to the story editors and directors.

Then go over your second sequence in the same way, listing carefully under that heading all of the essential parts of the story which you plan to cover in this section. And so on. You should not have more than five or six sequences in an ordinary length picture story. Seven or eight sequences are found in some super-productions, such as *Show Boat*. But *Show Boat* was originally made in seventeen or eighteen reels. It was released, however, in thirteen reels, and even then the picture was probably too

long for the average audience, in spite of its being a super-production.

It is well, in analyzing your story, to keep the number of sequences reduced as much as possible. If you find that you have more than five or six sequences, begin to eliminate unnecessary action and characters. These, if allowed to remain in your story, will only prejudice the screen editors against recommending it for consideration by the studio executives.

When you have analyzed your story into sequences, with the actions and sets in each sequence as suggested, you will find that a peculiar thing has taken place. The story, as you thought it was, has become something quite different. The pleasing language and vague, abstract ideas, which often carry a written story to success, have all been eliminated. When you are listing the essential characters and action in each sequence, these vague ideas and literary forms of expression have been resolved into visualized action and brief, pithy dialogue. You may find that a story which seemed over-long in its original literary form has boiled itself down to one or two sequences containing usable action. If so, you know that you have no picture story. On the other hand, you may find that a very short story, which jumps from San Francisco to Russia, through Siberia, back to England, and home again, contains an impossible number of sequences, a tremendous number of extra characters, and an altogether prohibitive amount of motion picture material. In that case, you must take the same story and search out the essential parts of the plot, characters, scenes, and dialogue. You will find, much to your surprise, that when a story is translated from words to scenes and ac-

tion, you can put over the same essential story values in a small fraction of the space required for the literary form of the story. For instance, it is sometimes quite possible to take a story wherein the characters travel all over Europe, have submarine fights in the Atlantic, and end in a New York night club, and tell essentially the same story for picture purposes in a locale consisting of a farmyard in the Middle West. This may seem exaggerated, but we have personally observed the adaptation of a story which was actually changed for the screen as indicated.

CHARACTER AND CHARACTER PORTRAYAL

The task of depicting character in the sound picture is, in one sense, far easier than in the silent picture. The latter, being essentially pantomime clarified with titles, is cruelly restricted as a medium of depicting human nature. Few of us express ourselves in postures and gestures. Our natural manner finds itself freer and surer in spoken words and, most of all, in decisive acts involving such forms of language as promises, commands, prohibitions, and so on, all of which readily lends itself to reproduction in talk and scene combined.

To this extent, character drawing in sound pictures seems to offer pretty much the same opportunities and difficulties as in the drama of the Broadway stage. But a closer study brings out the somewhat startling fact that a sound picture, skillfully handled, can reveal more of a personality than any other device of art or science. The actor on the stage can talk, gesticulate, and move to and fro; but there his powers end. The actor of the talking

screen can do all of these things and then carry on his subjective life in the presence of the spectators. We can show pictorially his memories, his fears, his hopes, and his cunning schemes. We can reveal his clenched fist in a close-up. We can show the beads of perspiration on his brow, as he trembles with suppressed rage. And, perhaps before this book has been printed a year, some ingenious director will have hit upon tricks now beyond all imagining, tricks which will make the dual speech, invented by Eugene O'Neill in *Strange Interlude,* seem very, very simple.

Perhaps the soundest general advice to give the writer of stories for sound pictures is this: *Employ any device whatsoever that helps you to depict a character quickly and vividly. Your one serious limitation is the time required for presentation.*

It will seldom injure your cause if you portray characters through the medium of strange and difficult devices. A director with intelligence and imagination (and such there truly are!) will be intrigued by these, even though he realizes that he cannot use them on the screen. Then, too, he will endeavor to find more practicable ways and means.

The next general advice is that, *whenever possible, a character should be depicted in some emotional moment, inasmuch as the strongest human impulses come to the surface then under conditions that almost any ordinary person readily understands. Furthermore, it is the spectacle of such an emotional moment that arouses the spectator most intensely and lifts him out of himself* (*either pleasantly or unpleasantly*).

A little later we shall discuss, at great length, the

emotions and their portrayal. Just now, let us sum up the simpler facts about character and the characteristic acts in which the emotions arise. The ordinary man is interested in the emotional side of human nature far more than in character, as such. But he knows he can appreciate the emotions most thoroughly only when he beholds them arising in their natural setting. We mean by this nothing profound, but rather the simplest of things: you, a spectator in the theater, are not interested in mere rage, as a detached emotion, but you are interested in a man who flies into a rage as a result of his wife smiling at an old flame of hers in the theater. Fear, as a biological phenomenon, scarcely grips you; but would you not enjoy the spectacle of a woman stricken with terror at the sight of a man who once had threatened to slay her because she rejected him as a suitor?

Emotions have no existence or meaning apart from men and women who face situations and struggle in them. They are only a phase of personality, nothing more. But they happen to be the one phase which is most intimately bound up with pleasure, both in the presented character and in the movie spectator. Hence, the stress we place upon them.

WHY THE WRITER DEALS WITH CHARACTER TRAITS MORE THAN WITH TOTAL PERSONALITY

Were the author of a sound picture allowed unlimited time (and expense) for the presenting of his story, he would occasionally take a year or two off to describe complete personalities in action. To do this he might require fifty reels, if not a hundred. For personalities, even the

simplest, are amazingly complex and full of subtle changes from year to year. Rare is the novelist who finds the patience and courage to give his readers a well-rounded panorama of a human being. Proust has done it, but how few people will wade through his many volumes! No motion picture writer has ever dreamed of it—though some millionaire amateur may some day startle the world by producing just one such epochal film, and possibly he will find here and there an audience eager to sit through ten nights of its continued performance.

Within the span of eighty or ninety minutes, a personality cannot be depicted, save by sheer luck or unmitigated genius. The best that can be done is to select some small set of traits in a personality and exhibit these in their high lights. Ordinarily, the writer moves most cautiously when he narrows the content of his picture to a single important trait which develops many emotional moments.

What do we mean by such a trait?

A character trait is a manner of thinking, feeling, and acting, which is either congenital, or which has become so much a part of our physical and mental life that, after childhood, it is subject only to minor variations and modifications. Every character trait is highly sensitive to certain factors in all situations, and far less sensitive to others. The person possessing the character trait, therefore, tends to overemphasize some factors of these situations and to underemphasize others in reflection before action. When he finally acts, he behaves in a special way, which marks the trait.

In analyzing character traits, keep in mind the fact that:

1. Traits apparently simple are often highly complex.
2. Certain traits are secondary and derived from primary character traits.
3. A trait may assume different aspects, depending upon the variations in the objects and situations which it faces.
4. Many unrelated traits may result in almost identical behavior in certain situations. We can distinguish these only after we have analyzed the characters as they behave in totally different situations.

These are not rules for the writer. They are simply warnings from a psychologist, which, if taken seriously, may help you to avoid the blunders of many beginners. You succeed in depicting men and women in so far as you make each act *unequivocal* and *significant*.

Now, what is it that makes an act thus? The full answer to this question would fill a volume, every page of which would be precious to the story writer. All we can say here must be simple and brief. But, in a few words, the way can be pointed out, so that you may pursue it as far as you choose.

First consider the negative aspect.

Some acts do not reveal character at all. It is true that a man's nature may be involved in all of his acts, but that does not necessarily mean that his whole nature is expressed. It is, therefore, necessary to keep in mind the difference between acts which reveal character and those which do not.

There are two kinds of acts: first, noncharacteristic acts, which are automatic responses to simple stimuli peculiar to the individual concerned, or ways of behaving which are more complex but which are not used to manage dramatic situations. Secondly, there are characteristic acts. These acts reveal the way in which an individual manages a total situation which involves a conflict of

wishes and subsequent decisive actions. Here, conflicting impulses are adjusted as a result of reflective thinking. As you study people, keep in mind these classes of acts.

A perfect specimen of a noncharacteristic act is a sneeze. Not that all people sneeze exactly alike. But rather that *a man's particular act of sneezing reveals to us nothing about his personality beyond the manner in which his face muscles react when the mucous membrane of the nose is irritated. This situation is so limited that it lacks significance in the larger life pattern; or, if it has any significance, it is exceedingly trivial.* As we would ordinarily put it, sneezing means little or nothing as an index of either character or personality.

Nor is this all. Sneezing is highly equivocal. That is, you cannot tell, merely from observing the act, how it relates to the situation in which the man sneezes. Does he sneeze because he is in a draught? Or as a result of dust getting up his nose? Or because it is hay fever time? Or what? To be sure, you might observe the stimulus; and you would understand the act. In which case, the act would be clear enough. But, as a rule, we rarely see the actual stimuli which touch off simple reflexes.

A simple characteristic act is illustrated by a small boy lying to his mother when she demands how he has wet his clothes. The boy has been in swimming, contrary to his father's orders; he knows father will chastise him if the truth comes out. So he fibs. Here is an act that expresses a broad human trait of escaping pain by shamming. In the particular boy, it may be an established habit that bobs up over and over in a variety of situations. This frequency of recurrence makes it characteristic of that particular boy. It throws light on his

larger way of life. It gives us a basis for making certain specific predictions about him. It also aids us in adjusting ourselves to him in social and business relations. It can be both unambiguous and significant.

It does not follow that a boy who lies, under the threat of corporal punishment, will also lie under many other conditions. Old maids and Puritans often suppose so; and they condemn to hell-fire every youth who swerves, by a hair's breadth, from the truth. But each of us probably has a score or more of fairly distinct ways of coloring or hiding facts, each way being specially adapted to special situations. Thus, we assure somebody, when we meet him at a dance or a tea, that we are awfully glad to see him—this being purely a matter of etiquette. On the very next day, when he happens to intrude upon a confidential business conference, we may feign irritation at his presence. And so on.

In drawing character, you will pick out the nicely differentiated act of prevarication that fits the occasion. But you will find that there is something beyond this. There is also the necessity of finding and portraying acts which reveal still more of a personality. These may be called uniquely characteristic acts, by way of distinguishing them from the sort we have just described.

A uniquely characteristic act is any act so performed, in such a situation and such a way, that its observer is convinced that the trait molding this act will dominate in all other situations coming up in the life of the character so behaving. Character is always determined by three stages of action in ordinary intelligent behavior, which should be kept well in mind in order to understand the uniquely characteristic act. These stages are (1)

the immediate response, (2) the reflective delay, and (3) the active solution. Of these three stages of action, reflective delay is the most significant in showing individual differences between men. For here, men vary from one another most widely in the balance and strength of the forces working during this stage of action.

Jones never "stops to think." He leaps into action the instant he is aroused. Smith is canny. He holds back; he puts off decisions until the last moment. He infuriates Jones by pondering every detail, by conjuring up all sorts of difficulties. Robbins gets excited and starts to do something drastic, then suddenly goes cold and accomplishes nothing. Here are three common individual differences, among tens of thousands, which spring mainly from variations in the reflective delay, though partly, also, from the other two phases of behavior.

Each of us responds in some peculiar and unique manner. We are not all equally sensitive, nor do we feel pleasure and pain identically. Least of all are our emotions alike. One of us is never frightened, while his brother suffers the hell of endless petty terrors. The highest individuality, at least so far as story presentation goes, probably is to be seen in the blend of the two chief factors of the delayed response, which we call emotional and intellectual behavior.

The emotional behavior is an attitude toward something which involves our personal action. The intellectual behavior is an attitude toward something more or less detached from any immediate action. In an instant of thinking, we "stop, look, and listen." We consider, analyze, recall, imagine, and guess. While the instant lasts,

we are relatively unemotional, except in so far as we are eager to master the facts before us. But as soon as we crave to assert ourselves, or to coax somebody, or to give in to an enemy, or to comply with a friendly request, our emotional selves rise.

The uniquely characteristic act usually involves both the intellectual and emotional varieties of behavior. The pair, in combination, reveal a man's nature as deeply as any single aspect ever can. This is why, in a later chapter, we devote so much space to an analysis of the emotions. We would give equal attention to the intellectual life, but for the fact that it is less closely connected with the feelings. Thinking is a somewhat neutral operation. For many people it is downright unpleasant, largely because it is difficult. But motion picture audiences want to be entertained. Seeking pleasure, why should we force them to watch people go through intellectual acts?

We get more fun watching other people take attitudes and do things than we get out of debates and arguments and elaborate discussions. So, in art, we concentrate on those characteristic acts which emerge most sharply in emotional instants. This, however, must not lead you into the error of supposing that the reflective delay should be left out of the picture. Simply bear in mind that, as a rule, it is too slow and too intricate to be well drawn; and that it lacks the pleasant feelings, both in the character and in the spectators.

DIALOGUE

And now we come to dialogue, which ranks next to the story itself in importance, so far as sound pictures go.

Here is a subject on which virtually nothing has ever been written, a subject which nobody, down to 1928, had reason to take seriously. Even the dialogue of stage plays has never been properly analyzed and reduced to its technical elements. So what you are about to read is absolutely new. It will sound very strange to you, unless you have studied drama closely; and even then, much of it may turn out to be a little perplexing.

To understand the aims, purposes, and methods of dialogue, we must go all the way back to language itself. We don't mean the English language, and we don't mean grammar or rhetoric. We mean the primitive act of uttering sounds. This is a matter about which few people are well informed. It is intricate and obscure; so most of it will have to be glossed over here. But certain facts must be emphasized.

The novice assumes innocently that dialogue is talk, and that talk is merely telling somebody something. This notion is responsible for stupid conversation in daily life and for still duller dialogue in plays and pictures. Dialogue is not merely talk. It is a form of language. And language is much more than talk, if we define talk as telling somebody something. Language is *vocal behavior*. And vocal behavior embraces many, many acts besides talk. The most important of these may be classified as follows:

1. Noises incidental to breathing, sneezing, coughing, snoring, and so on.

2. Ejaculations, such as the noises made as responses to simple stimulations of shock, surprise, pain, pleasure, and the like.

3. "Self-expressive" utterances, such as the cries and words which are evoked in moments of appetite and emotion, when we give vent to our wishes, cravings, commands, and personal atti-

tudes toward esthetic objects that are more complex than those which call forth simple ejaculations such as "Lovely!" or "Ugh!"

4. Mixed forms, which include, in various proportions, noises, ejaculations, and "self-expressive" utterances, especially in the form of musical expression, singing, whistling, improvising, and so on.

5. Soliloquy, or "thinking aloud," wherein we carry on intellectual processes with the aid of private speech in which we address nobody but merely try to make clear to ourselves situations which we find hard to analyze wordlessly.

6. The language of social encounter and adjustment, in which we explicitly avoid using words as a means of communicating our thoughts, and try, rather, to wheedle, cajole, flatter, deceive, or otherwise manipulate the people to whom we speak. Here belongs the speech of formal etiquette, of course, as well as the lies of Ananias.

The above represents six kinds of vocal behavior, no one of which employs words as a means of reporting facts. So, we have at least seven varieties of language entering into dialogue.

Your skill in writing dialogue will roughly be measured by your deftness in using all seven kinds of language appropriately throughout the action.

We strongly advise you to experiment with dialogue *ad lib*. You may discover that you can do nothing with it. But if you can, you will vastly improve your output by experimenting. Many clever writers and directors have used this method to excellent advantage. There are sound psychological reasons for this success. Above all, dialogue is talk, and we talk best when we talk. When you sit down at a typewriter, you use your fingers, not your tongue. However well trained your fingers may be, the odds are a hundred to one, or more, that your tongue can make up conversation better than your fingers can.

How can you record extemporaneous dialogue? Obviously, in only one of two ways. You may engage a high-speed stenographer to take down everything you say, as you talk it off. Or you may speak into a dictating machine. Nobody can tell you which way is better. Some of us are stricken dumb in the presence of a stenographer, while others of us feel blank, empty, and foolish when we talk at a machine. On the whole, the dictating machine is more efficient. It is easier to check up on the effects of extemporaneous dialogue with it. Here is one writer's report of its use.

"I begin with a fairly complete silent continuity. This I study carefully before I begin inventing dialogue. Various possibilities occur to me through this study, and I jot them down at appropriate places on the script. Now I am ready to begin. I place the continuity script before me and begin talking the various parts into the dictating machine. I dispense entirely with the mechanical form of a stage play, in that I do not mention the names of the characters. If, for example, there are two men and a woman present in a scene, I adopt three different voices to represent them, so that I do not have to stop and call off the name of each as I talk. These voices need not be dramatically correct at all. They are merely key signals to indicate which character it is. Thus it is possible to make the talk run right along without any artificial breaks. Should there be any other noises, such as a pistol shot, a thunder storm, somebody breaking a window, or whatnot, I invent a noise for these, usually a crude faking of the sound.

"As soon as this first extemporizing has been finished, I turn back to the beginning of the script and listen to

what I have made up, reading the script through while I hear my own voice in the dictating machine. When I find that I have said something which must be changed, I make a note of it on the script at the point where the change should occur. To prevent confusion, these correcting notes should be written in a different color of pencil or ink from those which were set down in advance of the dictating. I next take a fresh set of dictating records and make a complete revision, straight through. Then I listen in on this. Not until I have developed the dialogue to the point where I feel it is essentially correct do I turn the records over to the stenographic force to be typed."

The dialogue is now ready to be criticized by directors and editors.

In writing dialogue, bear in mind that about one foot of film is required for the word of average length. If you have absolutely continuous talking throughout the reel, you can crowd 1,000 words into it. But you must remember that dialogue is never continuous talking. There must always be an appreciable pause between successive remarks, and frequently there must be long pauses to produce the proper dramatic effects. This means that you cannot safely count upon using more than 500 or 600 words per reel, even when the entire reel is dialogue. Should your story call for silent action here and there, as the great majority of stories do, the number of words per reel will be correspondingly reduced. In one picture on which we recently worked, in which the illusion of almost continuous dialogue was produced, barely 200 words were actually spoken in one reel.

You must consider whether important dialogue takes

place on sets or locations where sound recording is difficult or impossible. The best sound effects can be obtained only in the sound-proof buildings or sound-stages on the studio lots. The most important dialogue and the most elaborate song and dance numbers, therefore, where fine harmony or voice modulation is an essential part of the story, should be laid in sets which can be erected on the sound-stages. Shouts, mob cries, the sound of automobile horns, and the like, can be very well recorded with portable sound equipment on outdoor locations or large open sets. Dialogue in such sets can be made fully effective only in close-ups. Minute study of the action of any story, from the point of view of effective sound and dialogue recording, therefore, should be made. This will greatly help it from a practical production point of view.

Because the sound picture audience is not limited to the cultured, or to the clever, or to the mature, but embraces young and old, high and low of every nation, race, and clime, the psychological appeal must be kept down to the universal and the elemental. No magazine has ever been forced to this extreme policy. Even periodicals having two million circulation can offer stories of a fairly high intellectual level. Your dialogue, therefore, must not only be vivid, terse, and in character, but it must be easily understood by the conglomerate millions of motion picture fans.

One of the most awkward tasks in dialogue turns on the choice of words and expression. There are two guiding principles here. The first is that the language must express character reactions and also serve to advance plot action. The second is that it must produce the desired

effect upon the listeners—which means that it must be not only intelligible but capable of arousing the appropriate emotions in tens of millions of people.

These two principles, in turn, are subordinate to the highest principle of time. That is, the dialogue must advance apace with the visible action and under no conditions be allowed to slow down the latter, *unless, by so retarding it, the speech intensifies plot or character in some important way.*

Here you have a complex regulation of the highest order. This is why there are so few truly great dialogue writers. Those who have succeeded with stage plays sometimes fail in sound pictures, usually because they fail to appreciate the high velocities of the latter. Let me explain this point, as it may puzzle some readers.

Let us assume that a play and a picture run for the same time, two hours. The play has three acts, each with two scenes. Probably each scene has no more than three sequences. This makes a total of about eighteen sequences. Look now at the sound picture. It may have anything from fifty to a hundred sequences; and, unlike the play, within its sequences we have many shots. Each picture sequence, therefore, is much shorter than a play sequence. Hence, the number of words and other language effects must be much smaller than in the play. Each word must convey a maximum of meaning and emotional effect. And it must also be so selected as to complete the requisite phrase of meaning in an exceedingly brief time span. To put it roughly, in arithmetical form, the ratio between time span and expression, here, is from five to ten times higher than the ratio on the stage. In one given unit of time, the stage play must con-

vey one given effective expression through language; and in the same unit of time the sound picture must convey five to ten such expressions.

This, to be sure, is theoretical. In present practice, no director achieves the indicated velocity of expression in dialogue, although here and there, in the high spots of *Alibi, Bulldog Drummond,* and *Dynamite,* we see the speed being approached. The critical onlooker may have trouble in sensing it, because the talk all seems so natural. But if he could see the printed pages of the continuity, the fact would stare him in the face. The dialogue is telegraphic to the extreme. It runs on, a rapid fire of monosyllables, grunts, laughs, and cries, with scarcely a well-rounded sentence anywhere.

Here is a fair illustration of what has to be done to stage dialogue when you are translating it to the tempo of a sound picture. We have chosen at random a short passage from *The Shannons of Broadway* as the text to be recast. You see the original in the left-hand column. Opposite, in the right-hand column, is a suggested abridgment which might do for the sound picture. We could shorten it even more, were it necessary.

As It Runs in the Stage Play:	As It Might Better Run in a Sound Picture:
Emma I ain't insinuating nothing, but I know where you got all your elegant ideas for fixing the act up from.	Emma Bah! *Your* ideas! *Yours!*
Mickey Well, they was good ideas, and I never got 'em from her.	Mickey Well, her old man's, then. And good ideas too!

EMMA

No, but you got 'em from that old fathead of a father of hers. Trying to tell me that an aniline drop would look as well as a plush, and cheaper and easier to carry.

EMMA

You think an aniline drop's as good as a plush?

MICKEY

Yah, and it is too.

MICKEY

Yah.

EMMA

Certainly it is. All you have to do is to chuck it in a trunk. And when you get to your suite, Slim, and get your drop out of the trunk, that is exactly what it looks like. Aniline drop! Huh!

EMMA

What it looks like when you haul it out of your trunk!

MICKEY

Hey, look! Do you know you gotta carry a stage hand to set up a plush drop? Do you?

MICKEY

You gotta carry a stage hand to set up a plush drop—

EMMA

Well, suppose you do? Don't that add class to the act? Ought to have a piano player, too. That's what adds the real class.

EMMA

And we should carry a piano player too. That adds class—

MICKEY

Yah, and a musical director and six chorus gals and a maid for you and a valet for me and a secretary for us both and a dog leader for the blight there —a-h-h!

MICKEY

And a musical director and six chorus girls. And why not a maid for you, huh?

EMMA

Now you listen to me, Mickey Shannon. Will you ever get it through that thick Irish head of

EMMA

Dumb bell! Class is the whole cheese. People want to see class—

yours that class is everything? Class counts for more with everybody than anything else. Now you can kid yourself that we've made good with our old act and made money and saved money and all, but you can't tell me that, if we didn't class up our new one, we could make just as much and more than they can. 'Cause we got the material. Mickey, you're a natural-born showman. You write better material than any one I know—

MICKEY

Hey, don't try to bull yourself out of this argument now. We been doing this same act with new and better material for years and getting good dough with it. Now you want to change everything and add expense, and I tell you, *No!* plush drop for mine.

EMMA

And I tell you, no cheap, painted scenery for mine.

MICKEY

And there we are, right back where we started from.

EMMA

Yes, right where we were when you let that little agent kid you into joining this cheesey road show. Gee, I bet they routed this one out of the Sears-Roebuck catalogue.

MICKEY

We made good with the old act, and there wasn't no class in it—

EMMA

We'd be rich now if there had been. You're a grand showman. What you'd a done with class!

MICKEY

Bull! You just want to blow the kale. Just like a fool woman. Out for show! It's aniline for us. Get me?

EMMA

Oh, indeed?

MICKEY

That's where we started from.

EMMA

Right in a cheesey road show!

This specimen affords us no opportunity to employ the more elemental forms of language such as grunts, emotional outcries, and the like. To drag them in, merely for the sake of showing them off, would not help. Our point is made when we show you the brevity of the sound version.

CHAPTER VI

RHYTHM

In standard commercial pictures, rhythm still remains an undiscovered art. Europeans have devoted much time and thought to it, but the practical difficulties of working out pictorial rhythm, through the plot and the larger sequences, are so great that we advise all writers to ignore this phase of motion picture technique. Whatever can be done about it will be done in the studio; and that will be very little.

But it is important to point out, in a word or two, the possibilities of rhythm, even though these can rarely be realized. Now and then, a writer may hit upon a story idea which spontaneously exploits many kinds of rhythm; now and then, some director, born with keen sensitivities for rhythm, may manipulate stories in such a way as to bring out rhythmic values. In such rare instances, an extraordinary picture may arise, if writer or director can be made aware of what is happening.

Rhythm is an experienced recurrence of time patterns. The source of the experience may be sights or sounds, and perhaps even odors—though this is a matter of great dispute. The final stage of the experience is muscular: some parts of the body move in response to the perceived time pattern, and the combined effect of these movements, and the sensory impressions, is the unique "feel" of the measured swing which we call rhythm.

Now, in a sound picture, what varieties of rhythm may develop? Ignoring those which may arise solely in situations presented by particular stories, we find the following:

1. The ordinary rhythms of music.
2. The ordinary rhythms of march and dance.
3. The ordinary rhythms of language, especially singing and dialogue.
4. The extraordinary rhythms of *total picture tempo,* now within a sequence; and again between sequences.

Only the last of these calls for comment here. It is the recurring time pattern of the longer story movements. What the literary critics refer to as the subclimaxes of an advancing plot may sometimes constitute the rhythmic units of story movement. We say they *may.* It all depends upon the feeling for time patterns which the writer and director happen to have. Within each moment of action leading up to a subclimax, the velocity of dialogue and episode may increase up to the subclimax itself; then back it sinks, to make a fresh start toward the next subclimax; and so on.

Another mode of this same picture tempo is the character rhythm. The hero, for example, may have a typical and significant slowness of speech and gesture, as Lord Elton does in that magnificently rhythmical sound picture, *The Last of Mrs. Cheyney* (Metro-Goldwyn-Mayer), whose finer structure, we fear, was far too subtle for most spectators. In each sequence of dialogue, this precise pattern recurs many times, with a startling cumulative effect. It attains extraordinary quality as the major tempo of the story accelerates toward the grand climax. Lord Elton refuses to speed up at all. Let everybody else

shriek and exclaim and chatter as swiftly as may be; will he talk faster? Not he! Or will he gesticulate madly? Far from it! The contrast becomes maddening, then funny.

Let us study a few of the more elemental aspects of dialogue pattern.

Here is a highly artificial specimen of language rhythm. We deliberately simplify its pattern in order to make its structure as clear as possible. To get the psychic effect of the swing, you must read it aloud; or, better yet, have somebody else read it to you.

Mother and daughter are discussing the problems of a Fifth Avenue business which the daughter has just started. Each woman wants to run things, but the younger one is afraid that the money will give out before success will follow.

MOTHER. What a wonderful show window we have! It cost eight hundred dollars to fix it up, but it will repay us.

DAUGHTER. People do stop and admire it. But—will they come in and buy? I wish I could be sure of that.

MOTHER. Of course they'll come in. Not at first, to be sure. But after a few days. They always shy away from new shops, until they feel they belong.

DAUGHTER. But can we wait? Think how much this shop is costing us every twenty-four hours. How much cash have we?

MOTHER. Quite enough to keep things going smoothly for two more weeks, even if we don't make a single sale. Don't worry, dear.

DAUGHTER. I read in a book that it takes months and months for a business like this to establish itself. Suppose we take that long?

Here you have an evenly patterned speech rhythm, with no intervening silences and no shift of internal tempo in the individual speeches. It would be hard to devise a

more monotonous dialogue. And, of course, the mere length of each woman's remarks makes these impossible in sound pictures, which must move fast.

Let us express this pattern in a diagram, thus: MMMM-MMMMMMM — DDDDDDDDDD — MMMMM-MMMMM — DDDDDDDD — MMMMMMMMM. Now let us change this by preserving all the remarks, but interpolating expressive action, thus:

MOTHER. What a wonderful show window we have! It cost eight hundred dollars to fix it up, but it will repay us.

[*She tiptoes up to the show window, from the interior of the shop, peers through a curtain, and gazes at the passers-by who pause to look at the display*].

DAUGHTER. People do stop and admire it. But—will they come in and buy? I wish I could be sure of that.

[*She clasps her hands nervously and stalks up and down the empty aisle of the shop, while her mother continues to eye the crowds outside*].

MOTHER. Of course they'll come in. Not at first, to be sure. But after a few days. They always shy away from new shops, until they feel they belong.

[*She turns toward her daughter, now at the rear of the shop, marches triumphantly down to the girl, takes her hand, and strokes it kindly while smiling at her*].

And so on.

How does this differ, as a rhythmic pattern, from the first?

First of all, there is the relief effect that comes from two new foci of attention. The first focus is the *incidental action*, the second is the *parallel silence*. In diagram, this can be thus indicated: MMMMMMMMMM — Action-Silence — DDDDDDDDDDD — Action-Silence — MMMMMMMMMMMM — Action-Silence — DDDDDDDDDDDDD — Action-Silence.

Here again is a rhythm that is hopelessly bad for the

sound pictures. The net velocity of plot movement is much too low. The monotony of the even counterpoint of conversation, which was the curse of the first pattern, has been corrected, in large measure. Now the listener is eased by the intervening silences that accompany the incidental action of mother and daughter. But what is gained thus is more than offset by the loss of speed in action. Esthetically, this rhythm is, on the whole, moderately pleasing. We reject the design on technical grounds alone; no sound picture has time for such leisurely conduct.

To speed the pattern up, let us try a third form. Let the mother speak as before, but let the daughter wax ejaculative. And let all incidental action between speeches fall out. Now we have something like this:

MOTHER. What a wonderful show window we have! It cost eight hundred dollars to fix it up, but it will repay us.

DAUGHTER [*in nervous exasperation*]. When?

MOTHER [*complacently*]. Not at first, to be sure. But after a few days people will begin to come in. They always shy away from new shops until they feel they belong.

DAUGHTER. How's cash?

MOTHER. We've enough to keep things going smoothly for two more weeks, even if we don't make a single sale. Don't worry, dear—

DAUGHTER [*a little hysterically*]. I? Worry? Pooh!

Here is something quite different. Notice the pick-up, as the auto salesman would say. How fast things get under way now! Then, too, observe the brisk alternation of long and short talk. Each serves as a relief to the other. Its diagram is as follows: MMMMMMMMMM — DD — MMMMMMMMM — DD — MMMMMM-MMMM — DD — MMMMMMMMM — DD.

Count the seconds that elapse. Compare with the

time taken by the previous patterns. See how much faster your story is running? But even this design is by no means the swiftest, though it pleases the ear. Here is a still faster rhythm:

MOTHER. Great window, that! Cost eight hundred—
DAUGHTER. When will it pay?
MOTHER. Soon. Give people a week to learn of us.
DAUGHTER. How's cash?
MOTHER. Enough for two weeks.
DAUGHTER. We need enough for six months.
MOTHER. Pooh!
DAUGHTER. I read it in a book.

Again hold the stop watch. Again mark the difference in velocity. Now, to the ear, this telegraphic pattern, this play of monosyllables, is by no means so charming as the longer and smoother swing of finished sentences. But it has the tremendous advantage of whipping up the main action to the limit. Hence, writers favor it, even though they appreciate its esthetic limitations.

To get away from the monotony of this rapid-fire talk, you may have recourse to the deftest of all patterns. It is the one which builds around the rhythmic unit of talk-gesture-silence, each element being as short as possible. Thus:

MOTHER. Great window, that!
[*Peers out. Both silent an instant*].
DAUGHTER. Bah! It won't pay.
[*Shrugs shoulder and turns back to mother*].
MOTHER. Give it a week. People will come.
[DAUGHTER *laughs hysterically. Both women silent a moment*].
DAUGHTER. How's cash?
MOTHER. Good for two weeks.
[*Silence again, then* DAUGHTER *laughs hysterically*].
MOTHER. What's wrong, child?
DAUGHTER. Two weeks! Ha! We need enough for six months.

And so on.

This often moves nearly as fast as the preceding pattern. It is usually the most effective of all designs, largely because it contains, within the rhythmic unit, the greatest variety of impressions: namely, talk, ejaculation, gesture, and silence. In order to make a richer pattern, we usually have to go outside of the dialogue situation and add effects from other characters or from the setting. That is to say, we must build into the total movement the interjections, or gestures, or bodily movements of bystanders; or we must make a similar use of physical objects to which attention may shift.

Once we do this, the variety of rhythmic patterns becomes almost infinitely rich. It is pointless to attempt illustrations. Let the student observe for himself, simply by adding various objects or minor characters, being careful to use them in a recurring action pattern. If the latter does not recur with considerable evenness, the effect of rhythm is not produced.

One more general fact about the simple dialogue rhythms. The final esthetic effect of a given design will vary enormously, according to the tempo of the talk, silences, and gestures. One and the same content here may yield startling differences, precisely as in ordinary conversation. Nobody can make positive predictions as to the precise shading which results from a given velocity. You should experiment with your own dialogues, to make certain.

As methods of sound reproduction improve, we may expect that dialogue will move at tempos much faster than are possible on the stage. The carrying power of articulate sound out of the mechanical speaker is already much

greater than that of any unaided voice. Within a few years, probably, the articulate quality of it will almost certainly come to surpass the human larynx. Then, instead of proceeding at the rate of from seventy to ninety words per minute of sustained speech, dialogue may move along at the rate of perhaps 100 to 140 words per minute (apart from dramatic silences). And then a new range of artistic possibilities will be opened up.

CHAPTER VII

FEELINGS AND EMOTIONS

We now come to the most important of all the writer's problems. It is the very heart of story technique. And the proof is that *the world and his wife go to the movies to be entertained, excited, and stirred emotionally in any pleasant manner.* Hence, the presentation of emotions and the arousing of emotions are the main duty of the picture artist, whether he be the story writer, the director, or the actor.

Probably nine out of ten stories which fail to sell in Hollywood contain some serious defect in emotional handling. It may be an error in the drawing of an emotion, or it may be the telling of events which cannot arouse pleasant emotions in the spectators. Few would-be authors have studied human feelings and emotions thoroughly. And still fewer are born with sensitivities which enable them to intuit this phase of man's nature, apart from all orderly observation and analysis. This is why we have decided to present the fullest treatment of feelings and emotions that has ever been made from the artists' point of view. Perhaps some readers will be sorely tempted to skip long sections of it. May we urge them to do so, if they must—but to come back later in a more studious spirit, after they have come to realize that, in these pages, they are dealing with the most dramatic phases of the human personality.

FEELINGS

Pleasantness and unpleasantness are called feelings, or "affective elements." They are somewhat like emotions, though not so complex. These feelings are the simplest experiences of an emotional nature which enter human life.

Pleasantness accompanies the expression of our natural impulses without interferences which cause us to stop and reflect on the consequences of our behavior. In other words, when everything goes the way we want it to, we feel pleasantness. This is because our impulses to behavior find successful and uninterrupted outlet. There is no conflict, no hesitation—only a smooth carrying through of our original impulses.

When there is a conflict of impulses, a weighing of factors, or an interruption in our original impulse tendencies, we feel unpleasantness.

When you put out a hand to pick up an object on the table, reach the object, and carry through the original plan of using it in some way, this action carries with it pleasantness of a mild sort.

But if, as the hand is extended, it is jammed up against the table by an opposing force, and the original plan is frustrated, unpleasantness occurs. It is unpleasant to have the impulse checked or stopped, even if the whole process can be gone through successfully almost immediately.

In the writing of motion pictures, pleasantness and unpleasantness must be combined, so that there is not too much of the first to make the picture saccharine, nor an overdose of the second to make it morbid. The final

effect of a picture with a happy ending is more potent than are the effects of the successive pleasant and unpleasant situations leading to the solution. It is possible to put many unpleasant situations into the first part of your story and still make its total effect pleasant by adding a happy ending.

On the other hand, if your story is to have an unhappy ending, you should cleverly weave in the pleasant elements before finally presenting an unpleasant solution, in order to make your audience like the picture as a whole and recommend it to their friends. The unhappy ending must not be the result of a series of unpleasant situations, because then your audience will not care what becomes of any of your characters. It must be handled in such a way as to make the audience feel that this was the only possible solution under the circumstances; and if it is logical, they will approve of your story.

EMOTIONS

An emotion is the consciousness of an attitude toward an object or person. The attitude may be of alliance or antagonism; and it may make the person feel inferior or superior to the stimulus which causes the attitude. There is much more to an emotion than there is to a simple feeling, such as pleasantness or unpleasantness.

To experience an emotion, a person must feel either antagonism or acceptance toward the object or person arousing it, and he must also either wish to control the object, or wish to have the object control him. Thus, a simple emotion is a combination of an attitude of superiority or inferiority and an attitude of rejection or ac-

ceptance. As we can control the feelings of our audience by presenting pleasant or unpleasant situations, so can we control their emotional reactions by presenting the action attitudes (alliance, antagonism, superior, inferior) to which we wish them to respond. That is, the situation in which the villain is beating the girl is undoubtedly unpleasant. But it also is emotional. It makes the audience feel antagonistic toward the villain and wish to become superior to him or to control him. Every one would like to enter into the battle and hit him over the head. Consequently, every one experiences an emotion.

To understand the attitudes of alliance and of antagonism, which we wish to compel our audience to take toward the situations and characters in a story, we must understand the four elementary emotions which are brought about by different combinations of these attitudes.

Compliance

This emotion is the result of the combined attitudes of antagonism and inferiority. If an object is stronger than we are, we wish to be controlled by it or give way to it in order to escape pain or suffering. We wish to be rid of it, certainly, but we also wish to move ourselves away from it, rather than to try to remove it by our own energies. In the barred-door situation, a compliant person would see the barrier as antagonistic. But he would feel inferior to it and would go away from it, thus escaping the pain he might feel if he tried to break it down with his body. A simpler illustration of compliance is a situation in which a person stands on a railroad track. He sees a train bearing down upon him. The train is, of course, antagonistic to him and superior in strength. He



TESTING SUBJECTS FOR THEIR REACTIONS TO SCREEN EPISODES

Breathing, blood pressure, electrical changes, and variations in grip were measured while the subjects watched the screen. The experimenters, Dr. Marston and Olive B. Richard, may be seen in the background, with three assistants seated near the subjects to be tested.



TESTING REACTIONS TO A COMPLIANCE EPISODE

Ramon Navarro, in *The Student Prince,* is being forced to take up the reins of a kingdom when he would rather remain in the rôle of the student prince.

steps off the track and lets the train rush past, thus escaping death at the hands of his antagonist. It is the innate nature of any physical force to comply with an opponent which proves stronger than itself. If it cannot overcome the obstacles in its way, it must then readjust itself to meet the situation without attempting to alter it in any way.

The motion picture writer should bear in mind that "nature" (beautiful scenery, forests, rivers, etc.) is the most pleasantly effective of all the possible compliance stimuli in the environment. It is a form of harmony with the environment. The person feels this environment as superior to him, and it is also antagonistic, since its nature is quite opposite to his own, and he must give up his personal consciousness to be at one with it. Nature is so much bigger than he is that he accepts it. He hears the rush of the mountain brook, the singing of birds, the sound of wind in the trees. He sees the hills, the river, the colors of the flowers and trees. He smells the odor of the newly turned earth, the flowers, and the grass. He feels the blowing breeze and the coolness of the mountain top. And because none of these various sensory stimulations is so intense as to make him more conscious of one stimulus than another, they tend to form a harmonious pattern in his consciousness, a pattern he alters his own mind to fit.

Dominance

This elementary emotion is a combination of the attitudes of antagonism and superiority. There is a slight unpleasantness to begin with, but when the emotion gathers intensity, pleasantness is felt as the action becomes

successful. The attitude of antagonism makes us wish to reject the situation, and our attitude of superiority makes us wish to control it. A simple situation of this kind occurs when a man wishes to enter a barred door to obtain the heroine or the jewels. He finds the door an obstacle to which he is antagonistic, and this initial barrier is unpleasant to contemplate. He increases his energy and breaks down the door, thus showing his superiority to it. The success of his action is pleasant to him.

Dominance is the most primitive of all emotions. It accompanies self-assertion of all sorts. Therefore, if you wish your audience to feel dominance, you must build a situation or a character toward which people will simultaneously feel antagonism and a desire to rise superior to it, overcome it, or control it, in order that they may finally get rid of it altogether.

There are many types of dominance. Two of these especially concern us: destructive and competitive dominance. These types are used as the foundation of a great many stories.

Destructive dominance is apparent in situations in which there is much killing, destruction of property, warfare, and general "hell-raising" activities. All our crime stories have as their basis this destructive type of dominance.

Competitive dominance forms the basis for the type of story in which two people are competing for some reward. This is the situation in which another person is the antagonist. There is no desire to kill the antagonist, for then the competition would be at an end. It is more the type of dominance that is exhibited in sports, such as tennis and football or, somewhat modified, in business.

3 *Inducement*

Here the attitude of alliance is combined with the attitude of superiority. This emotion should, to be effective, be pleasant. The mother is allied to the child; she is superior to him. Therefore, she wishes him to follow her dictates because she is doing what is best for him and because he cannot judge for himself what is the most effective way of accomplishing the things he must do.

There are many kinds of inducement which the story writer should recognize as requisites for certain types of story.

Most business relations—that is, between buyer and seller—are built upon the attitude of inducement. The buyer wishes to obtain some goods which the seller can provide. The seller induces the buyer to pay a certain price for the goods. The seller is allied with the buyer because both want to make the exchange. But the buyer is inferior because he does not yet own the goods. There is an interplay of inducement here, and that inducement which is strongest is successful.

There is the gold-digger situation, in which the little lady induces the gentleman to do something for her. If she is successful in picking the right man, he is allied with her, and inferior to her, because she is always holding something out as a reward. This situation is not pure inducement, since it contains elements of dominance and submission; but the initial and most apparent attitude is certainly one of inducement.

Asking the way to a hotel in a strange town is inducement; inviting some one to come over and play bridge is inducement; persuading a child to wash behind his ears

is inducement. As a matter of fact, inducement is one of our most common emotions. In all social situations, where peace and harmony prevail, one person leads or controls the others by inducing them to follow his ideas and his plans for their welfare.

Submission

This emotion combines the attitude of alliance, or acceptance, with the attitude of inferiority. It is always pleasant. Both dominance and compliance are normally felt toward things or toward persons who are bent upon destroying or belittling us, and we do not, therefore, feel an attitude of alliance with them. Submission and inducement, however, are emotions aroused by people alone.

A child feels an attitude of alliance with his mother, and he also feels inferior in strength to her. The alliance arises from the child's knowledge that his mother does not wish to destroy him, but rather wishes to help him all she can. He submits, therefore, because she is superior in strength, knowledge, and judgment, and because she wants to help him, or is allied to him.

That submission cannot be unpleasant should be borne in mind by every writer. It has long been thought that the slave, who is beaten and generally mistreated, is submissive. This is erroneous, since there is no alliance between the master and the slave, even though there is the element of inferiority. This situation is one of thwarted compliance, since the slave feels the master antagonistic and superior to him—but *he cannot get away* from the beatings, as he would if his compliance were successful.

Every audience enjoys tremendously the mutual submission situations in which a child is allied with some



TESTING REACTIONS TO A SUBMISSION EPISODE

Gilda Gray, in *The Devil Dancer,* takes the part of a captive girl trained to perform a dance expressive of submission to the Devil God.



SCENE USED TO TEST THE REACTIONS OF BLONDES AND BRUNETS TO THE EMOTION OF INDUCEMENT

From Greta Garbo and John Gilbert, in *Flesh and the Devil.* Miss Garbo is a blonde, and Gilbert a brunet. Each tries to induce the other in different parts of the film episodes used.

old man or woman, and especially when the child is crippled and the old man has to sell papers to buy medicine. The audience feels the alliance between these characters and also perceives the points in which each is controlled by the other. There is one thing to remember, however, and that is that prolonged situations of this kind lose their effect and, sooner or later, our characters must triumph over some obstacle, or else their submission becomes ineffective.

How People Express Their Emotions

While it is not strictly the writer's task, in building screen plots, to describe the action expressive of personality or emotion in any great detail, nevertheless it is extremely valuable for him to have these actions definitely in mind. Such knowledge will not only add realism to the characters whom he portrays, but it may definitely affect the action sequence. People influence one another by the behavior resulting from the emotions they feel far more than they do in any other way. It is very important to keep the action of the characters truly expressive of the emotions which they are intended to show. A first-class screen story, in fact, is written largely in action terms, both the plot and the characters being thus depicted in a concrete way which brings home the picture values of the story to editors and to audiences.

Many writers seem to believe that a given emotion may be expressed in only one way. Fear is a classic example. It seems to be a popular delusion that this emotion always expresses itself in running away or in a withdrawal action of some sort. This is far from being the case. Fear may express itself in quite the opposite way. In *The Drake*

Murder Case, Mrs. Drake fears the maid Lulu, who has some mysterious hold over her. Mrs. Drake expresses her emotion in a very aggressive course of action, designed to get Lulu out of the way. She calls the police and enters a complaint against her maid, saying that she has stolen a valuable necklace. This action expresses the dominant element in fear. Mrs. Drake's purpose was to sail for Europe while Lulu was held for investigation by the police. Thus, her ultimate action purpose was escape or withdrawal, which is typically expressive of the compliance element in fear. Yet, the audience is fully aware of Mrs. Drake's fear the moment they hear her telephone to the police demanding Lulu's arrest.

This is only one example of many which might be given to illustrate the point that nearly all emotions may be expressed accurately on the screen by many types of action on the part of the emotion-experiencing characters. Other illustrations follow.

For the sake of convenience, we may divide these illustrations of emotional action into two types of bodily behavior: the gross, or more obvious, bodily action; and the subtle, or finer, behavior.

Psychologically, it is true that emotion always expresses itself immediately in some form of bodily change or reaction. If the emotion to be expressed is tremendously strong, and if the expression is not checked or inhibited by some other emotion or by intellectual control, this expression will be equally intense and obvious. In short, strong emotions naturally express themselves in powerful and immediate action, which we here term gross emotional behavior.

In proportion, however, as other emotions tend to con-

trol the primitively strong ones, the gross expression of these strong emotions becomes restrained and partially suppressed. Furthermore, the more intellectual a character is, the more his emotions will be checked and brought under voluntary control. Intellectual development always tends to inhibit emotion or to control its bodily expression. When emotions are thus controlled, they express themselves in finer or more subtle bodily changes.

The writer should bear in mind, therefore, that he has at his literary command a tremendous range of expression for every emotion, with excessive or gross bodily action at one extreme, and subtle, or almost imperceptible, expression at the other. These extremes have been used effectively on both screen and stage.

Eva Tanguay and Al Jolson express love emotions, comic dominance, and many other appealing emotional states by extreme and violent bodily action. In singing his "mammy" songs, as well as in putting over slapstick comedy bits, Jolson moves every muscle of his body so violently and so tensely that the effect on his audiences is irresistible. They feel that the man is projecting tremendous emotional energy directly into the eyes and heart of every individual in the audience. This is close to the extreme of gross bodily emotional expression.

On the other hand, screen actors such as Rudolph Valentino and Greta Garbo express their emotions with extreme self-restraint and great subtlety. Valentino, in his rôle of sheik or Latin lover, would sit nonchalantly slouched in a chair while girls threw themselves and their passion at his feet in wild, exotic dance movements. The great lover scarcely flicked an eyelash in response. Then, with a slight sideways nod of his head, or perhaps a tiny

beckoning gesture, or the flicking of a cigarette ash in the direction of the girl, Valentino conveyed his approval or his rejection of the girl's love. This restrained behavior conveyed to audiences an impression of tremendous emotional power controlled and directed by an indomitable will. Valentino's success in using this technique of restrained behavior is probably without parallel in the history of the screen.

Greta Garbo similarly restrains her actions and facial expressions throughout the most passionate of love scenes. She shows herself always as the cool, mysterious, yet always irresistible, love magnet, controlling the destinies of men. Miss Garbo, like Valentino, accomplishes the extreme of subtlety, which assures her tremendous appeal and popularity on the screen.

The scope of the present volume does not permit anything like an exhaustive list of bodily expressions of the various emotions which we have described. We cite here, however, a few of the possible expressions in order to illustrate the great variety of physical behavior appropriately expressive of identical emotions and indicative of the range of this behavior from gross to subtle actions, as we have explained.

COMPLIANCE

A. *Gross Behavior*
 I. Illustrations
 a. Lindbergh ignoring newspaper attacks and jeers of his friends and calmly waiting until weather reports are favorable for his solo trans-Atlantic flight. He ignores the various weaker forces acting against him, but complies with the unbeatable weather forces by refraining from action, though still holding himself fully prepared to act at a moment's notice, as soon

as these irresistible forces of nature are moving in a favorable direction.

b. Gene Tunney, after being knocked down by Dempsey for fourteen seconds in the Chicago fight, boxes the round out with consummate defensive skill. Tunney "gets on his bicycle," runs backward and away from Dempsey, sidestepping him cleverly and never allowing Dempsey to get within a knockout distance of his body and chin. This action on Tunney's part is not to be interpreted as expressing fear or cowardice, but rather compliant skill in the prize-fighting game under conditions in which his opponent is temporarily stronger than he.

c. Stepping off a railroad track when a train approaches.

d. Withdrawing the hand from a hot dish.

e. A small boy crossing the street to avoid a crowd of bigger boys who are accustomed to tease him, and walking up the other side without appearing to hear their insults.

f. A man, who has been accustomed to cross the river on the ice, walking a mile upstream to cross a bridge after a spring thaw, when he thinks the ice has become thin.

g. A swimmer who has been caught by an outgoing current ceasing to swim against the current and swimming with it or across it until he is free from its power.

II. Physiological Expressions

a. General adjustment of the muscular tensions and gross movement of the body in such a way as not to conflict with harmful influences of the environment.

b. Relaxation of any of the tonic muscles of the body which are opposed to some threatening object.

c. Contraction of the anti-tonic muscles as necessary to withdraw any part of the body from the opposing object.

d. Relaxation of the grip, especially of the hand most frequently used.

B. *Subtle Behavior*

I. Illustrations

a. Shrugging of the shoulders.

b. A half-circular gesture of the hand with an accompanying lifting of the mouth or the words, "Well, go ahead."

c. Shifting the glance away from the object or person to be complied with.

II. Physiological Expressions

a. Decrease in the force of the heart beat, and either increased or decreased rate of heart beat, depending upon other bodily conditions.

b. Decrease in systolic blood pressure in arteries, and either increased or decreased diastolic blood pressure, depending on other bodily conditions.

c. Drooling at the mouth, with relaxation of jaw muscles.

d. Increased secretion of saliva and other gastric juices.

e. Increased blood to the stomach and digestive organs, and increased peristaltic movements of stomach and intestines.

f. Increased sweat-gland activity (as when a great deal of food is eaten; or the "cold" sweat of fear, consisting essentially of over-compliance emotion).

g. Inhibition of genital excitement and erotic emotion.

h. Occasionally, nausea, faintness, and relaxation of the bladder or involuntary movement of the bowels.

i. Contraction of the pupils of the eyes.

j. Contraction of the blood vessels which supply the tonic muscles on the outside of the body. Sometimes flushing of the face, neck, chest, and even the abdomen.

Dominance

A. *Gross Behavior*

I. Illustrations

a. A pioneer takes up a homestead on uncultivated land, far from friends and miles removed from urban civilization. He cultivates the land, builds a house, chops down trees, and finally manages to

achieve a comfortable living through his masterful dominance over natural obstacles.

b. Jack Dempsey, the "killer," attacking his opponent for a knockout at the climax of a prize fight. Every muscle in his body is tense, his arms swinging with swift force. He delivers blow after blow in swift succession. When his opponent goes to the mat, he stands over him, bent close to the floor, his clenched fist still moving back and forth like a piston rod.

c. The late J. Pierpont Morgan dictating a railroad merger. Morgan would sit at his desk, absolutely impervious to the pleas and arguments of his opponents, who were to be wiped out. He would point with a rigidly extended forefinger to the agreement to be signed. Suddenly he would lean over the desk and bang it with his right fist with tremendous force, and pens and inkwells would bounce off his desk. His mustache would be drawn back in a tiger-like glare, very like the expression of Dempsey in the ring. Yet, the expression of his eyes would be cold and impersonal. His dominance was of an intellectual nature, and its physical expression was modified accordingly.

d. A baby howling at the top of its voice and beating the side of its crib with hands and feet.

e. A husband smashing his wife's pet china because she has told him she will not do as he asks.

f. A small boy throwing stones through a window.

g. A lawyer tearing to bits the only documentary evidence of his opponent, stolen by the lawyer's detective.

h. A man kicking a dog.

II. Bodily Reactions

a. Contraction of all the tonic muscles.

b. Aggressive antagonistic action of any sort.

B. *Subtle Behavior*

I. Illustrations

a. Gene Tunney making Dempsey wait for him in the ring.

b. Tunney staring superciliously at an intrusive newspaper reporter who has asked him some question about his private life.
c. A society girl looking at a poor relative with a blank stare, and remarking, "Oh, really, now."
d. A man, about to be shot by Mexican bandits, nonchalantly lighting a cigarette and smiling at the firing squad.
e. A man lighting a cigar with a thousand-dollar bill.
f. A woman, whose husband has told her she is nothing but a woman of the streets and he is about to divorce her, replying with a rising inflection, "Really?"

II. Physiological Expressions
a. Tightening of the jaw muscles.
b. Clenching of the hands.
c. Dilation of the pupils of the eyes.
d. Increased strength and rapidity of heart beat.
e. Decreased action of sweat glands, except as secondary result of muscular activity.
f. Irregular breathing, with a changed ratio of inspiration to expiration, showing more exertion in every breath.
g. Rise in blood pressure of arteries.
h. Inhibition of digestive action of stomach and intestines.
i. Dilation of the blood vessels on the outside of the body and in the brain.

INDUCEMENT

A. *Gross Behavior*
I. Illustrations
a. A persuasive trial lawyer, such as Clarence Darrow, having little evidence to offer in behalf of his client, nevertheless persuades the jury to render a verdict of not guilty. In a case of this sort, the lawyer allies himself completely with the emotions and minds of the jury, and then proceeds to convince them that his own emotional conviction and intellectual opinions as to the innocence of his client are

superior to those which the jurymen already held as a result of the actual evidence in the case.

b. "Lord" Timothy Dexter, the eccentric merchant of Newburyport, Massachusetts, sent warming pans to the West Indies and persuaded native molasses dealers, very much against their inclination, to buy the pans and use them for molasses ladles. Dexter sold the entire shipload at a handsome profit.

c. Missionaries persuading native Chinese to give up their own religion and to accept Christianity.

d. A small boy inducing his mother to permit him to go swimming, by arguing that he is old enough to be a "regular fellow" and should learn how to look out for himself.

e. A wife inducing her husband to buy her a dress by patting his cheek, cooking his favorite dish, and flattering him.

II. Physiological Expressions

a. Some increase in the tension of the tonic muscles, with marked increase in the blood supply. Increased tension of the tonic muscles of the body, selectively to convey the suggestion or persuasion intended, and especially increased excitement in the brain and vocal cords.

B. *Subtle Behavior*

I. Illustrations

a. A man, wishing to persuade his plump sweetheart to diet, walks along the street with her, expressing his admiration of the thin girls whom he meets.

b. "Fishing" for a compliment.

c. A gesture of invitation toward bottles or other refreshments on the sideboard.

d. A girl drops her handkerchief to induce a young man to pick it up and speak to her.

e. Many of the methods of the mother in *Mother Knows Best* were subtle inducements intended to control the conduct of the daughter.

f. A baby holds out its arms to induce its mother to pick it up.

g. A number of minor movements and gestures, such as the coquettish glances of girls, arching of the eyebrows, smiling sympathetically or provocatively, tossing the head, quick movements of the body, such as flicking the skirt or suddenly turning the back toward the object of inducement, shrugging the shoulders, extending the arms, etc.

II. Physiological Expressions

a. Increase in the strength and rate of heart beat.

b. Marked increase in the systolic blood pressure, usually accompanied by increased diastolic blood pressure. Increased excitement and increase of blood to the internal genital organs.

c. Dilation of the pupils of the eye.

d. Decrease in the secretion of the sweat glands, except as secondary result of possible muscular action.

e. Marked decrease in the activity of the digestive organs and gastric secretions.

f. Greater than average activity of the thyroid glands is probably associated with the type of person feeling inducement, especially a woman who is a habitual inducer and who takes an almost constant interest in persuading other people to do as she advises.

Submission

A. *Gross Behavior*

I. Illustrations

a. Lady Godiva riding nude through the streets of Coventry, in obedience to the command of her tyrannical husband, for the sake of relieving the townspeople from his tyranny. In this case, the woman makes a double submission of her entire body and actions. First, she submits to the commands of her husband; and second, to the needs of her people. She voluntarily and willingly permits herself to be controlled throughout a complicated and unusual set of actions.

b. A slave kneeling voluntarily at the feet of his mistress.

c. A small boy wiping the dishes for his mother, doing so voluntarily and gladly in order to help or to please her. If he assists her either because of threatened punishment or promised reward, his action does not express submission, but rather compliance or desire.

d. A girl giving up a party because her mother is sick and needs attention.

e. A woman working all day over the washtub or sewing machine in order to clothe and feed her children. Of course, she dominates the machine or the sewing material in order to submit to the needs of her family.

f. A man doing Christmas shopping at his wife's request, or working around the house in order to please her and make her comfortable.

g. Sending flowers to a sick friend.

II. Physiological Expressions

a. Permitting another person to dictate or control the tensions and relaxations of the tonic muscles all over the body voluntarily.

b. Voluntary acceptance of another person's control by permitting him to restrain or confine the body, mind, or emotions.

c. General decrease in tension of tonic muscles all over the body, with selective increase in the tension of some tonic and some anti-tonic muscles, as dictated by the person to whom the submission is being made.

A. *Subtle Behavior*

I. Illustrations

a. Cleopatra, on first making the acquaintance of Mark Anthony, is reported to have jested with him in the manner of a common soldier, exchanging somewhat coarse remarks and practical jokes. Prior to this, she had been accustomed to exceedingly cultured forms of wit in all her relationships. Without any appearance of making an effort to please, she subtly altered the entire expression of her personality in submission to the preferences and tastes of Anthony.

b. Throwing away a cigarette when an elderly lady who dislikes smoke comes into the room.
c. A woman, quietly and with apparent carelessness, drops an expensive dish on the floor in order to make a guest, who has just broken another valuable dish, feel comfortable.
d. Smiling at the dull joke of another person.
e. A girl permitting a man to make love to her (as in *The Trial of Mary Dugan*), not because she is attracted to him, but because she wishes to make him happy.
f. Many slight gestures, such as opening the hand, palm upward, waving a person forward ahead of one, smiling deprecatingly in order to make another person feel superior and at ease, nodding consent, etc.

II. Physiological Expressions
a. Decrease in rapidity of heart beat and increase in its strength.
b. General decrease in stomach and digestive organic activity.
c. Decrease in activity of genital organs, with corresponding constriction of blood vessels and digestive viscera and dilation of blood vessels in genital organs.
d. Moderate increase in sweat-gland activity.
e. General steadying of grip tension, blood pressure, and breathing at a moderate medium level.
f. General stabilizing and harmonizing of all the internal functions of the body, in such a way that the maximum alliance or coöperation between these different functions is attained.

Normal Relations between Elementary Emotions

As we have already noted, there are both normal and abnormal relationships between the elementary emotions, with regard to the purposes with which these emotions are connected. When the four elementary emotions do not occur simultaneously, but rather successively, in the

normal relationship, compliance is followed by dominance, and inducement is followed by submission. We have already noted the conflicts which result when compliance becomes the final end or purpose of any given action containing dominance. The emotions of jealousy, hatred, and rage are made possible by inducement becoming the final purpose of an action which contains submission. There are, of course, innumerable complex actions which express all four primary emotions arranged in their correct and normal order of succession and purposive relationship. The following illustration, however, accurately describes the normal relation between the four elementary emotions in complex action.

A clinical psychologist quietly questions his patient and passively observes his behavior during many preliminary consultations. He then collects his notes and observations, concentrates his thought upon the entire case, and makes an analysis of the patient's mental difficulties and maladjustments of personality. The psychologist then begins to persuade the patient to change his course of action in accordance with professional advice. In the end, the psychologist removes the patient's emotional difficulties and effects a more normal and efficient organization of his personality, thereby improving his life and increasing his happiness.

In the behavior of the psychologist during the treatment of his patient, we see expressions of the four elementary emotions in their proper order: (1) compliance; (2) dominance; (3) inducement; (4) submission.

The psychologist begins by complying completely with the patient's existing state of personality and emotion (a method strongly advocated by Alfred Adler). The psy-

chologist accepts the patient just as he is, and merely observes and records his condition. This behavior constitutes intellectual compliance.

Next, he analyzes and reconstructs the entire personality picture. He attempts to understand his patient's personality and to master its hidden difficulties and maladjustments. Here, he dominates intellectually by overcoming the difficulties and resistance which blocked the complete conprehension of the patient's personality.

He then persuades his patient to behave in a new way, prescribed by the psychologist—a process which is clearly inducement.

Finally, the psychologist, by means of inducement, removes the patient's personality difficulties and serves the patient as he most wants to be served. This ultimate action expresses the submission, which is the psychologist's final purpose in undertaking the case. Compliance, in this whole case, made dominance possible; dominance in turn furnished the foundation for inducement; while inducement finally accomplished the ultimate purpose, which was submission to the patient's needs and requests for the psychologist's help.

The emotions which we have been discussing are the simplest and most elementary. Dominance, submission, compliance, and inducement never occur in real or in reel life in their elementary forms. Dominance, even in a fight, must be mixed with compliance and with a certain amount of submission.

We must know the elements of emotion chiefly to determine, in each situation, the predominating elementary emotion. We must also know something about its compounds to understand people and to write about them.

These mixed emotions include a tremendous variety of emotional states. They are termed sorrow, joy, fear, rage, grief, love, pity, sympathy, admiration, hatred, jealousy, and so on. Some are predominantly pleasant because they represent allied or harmonious combinations of simpler elements. The unpleasant emotions all represent states of conflict between two or more elementary emotions. Joy, love, relief, passion, and admiration are pleasant. Sorrow, fear, rage, grief, hatred, and jealousy are all unpleasant.

In building stories for the screen, we use both pleasant and unpleasant emotions. The emotions which represent conflict within the mind of the character portrayed should be used only in contrast to the pleasant emotions. The use of fear alone, for example, would have such an unpleasant effect on the audience witnessing the picture in which this one emotion alone was portrayed that the theater would be deserted after a single showing. A picture, however, which depicted its hero afflicted by fear during the early part of the story might show him meeting a girl who inspires him to conquer his fear and dominate the obstacles which confront him. In the end, this conflict emotion is conquered and repulsed by the pleasant emotions, dominance and love, and the total pleasant effect on the audience through this contrast makes it approve of the picture.

Many writers, especially young people who have not experienced the extreme unpleasantness caused by conflict emotions, portray too many unpleasant emotions in their stories. These stories depict unthinkable horrors and terrible emotional agonies suffered by the principal characters, and are, of course, unacceptable because

of their unpleasant emotional effect on normal motion picture audiences.

Heroes and villains should experience conflict emotions well toward the beginning of stories. The heroes, however, should overcome these emotions in the end. Furthermore, the leading character in a screen story must never be depicted as feeling too much fear, jealousy, hatred, or even rage, lest he lose, once and for all, the sympathy of the audience. His emotions must be kept, for the most part, normal and pleasant. On the other hand, no combination of unpleasant emotions is too extreme for the villain. He may show extreme fear, hidden hatred, devastating cruelty, and virulent rage, to the delight of the audience. For the villain stands for the obstacles which the hero must overcome in order to achieve success.

Characterizations should be subtly depicted. The villain, as a rule, should make a good appearance. He should cover his unpleasant emotions, revealing them only in moments when he is alone with his audience. The good old rules of the days of the ten-cent melodrama, with respect to the villain's villainy, have not greatly changed. When he is permitted to show too many of the pleasant emotions, he frequently elicits greater sympathy from the audience than does the hero himself, thereby ruining the average screen story.

The normal pleasant emotions which must be woven into the story are always complex, and the commonest in everyday life are desire, satisfaction, passion, and captivation. Appetite, or self-seeking, consists fundamentally of desire and satisfaction. Love, sex, or erotic emotion is made up of passion and captivation. Desire and satis-

faction are composed of different combinations of dominance and compliance. And passion and captivation are various combinations of submission and inducement.

Desire

The simplest of all desires is that which the baby feels for its food. The human body is a wonderful machine, so designed as to compel the infant to comply from within with certain substances in its environment which we call food. The mechanism by which this compliance is brought about we need not consider in the present discussion. Suffice it to say that when hunger pangs are initiated in the infant's stomach, he cannot pay attention to anything in the world but food. At the same time, he is driven to dominate the food by seizing and swallowing it. This drive, in fact, is the controlling emotional element in the spontaneous mixture of dominance and compliance. The infant is compelled to comply with the food by giving up everything else to seek it, while, at the same time, he wishes above everything else to dominate and possess the food with which he is compelled to comply. The simultaneous mixture of dominance and compliance, directed toward the same object, food, gives that peculiar emotional craving which we ordinarily term desire.

Desire is the mainspring of all complex human emotions. Early in life we begin to wish other things than simple food and drink. A child learns to desire toys, pretty objects of various sorts, sunshine or rain, ponds to sail his boats in, sand piles to build castles, and good times of all sorts. Later in life the same individual extends his desires still further. Girls learn to long for clothes, jewelry, parties, and beautiful possessions; and mature

men extend their desires to the far corners of the earth. They want houses, lands, yachts, rare and beautiful objects for their collections, and, in fact, every conceivable type of physical object which it is possible for a human being to possess.

Desire places the person experiencing it completely under the control of the object which he desires for the time being, while, at the same time, he strives madly to dominate this object which is controlling his attention.

One of the strongest elements of almost every story plot, whether for novel, stage, or screen, is desire. The heroine may yearn for clothes, good times, or social prestige. The hero may long for automobiles, high scholastic marks, or control of a tremendous commercial enterprise. The audience understands, and is thoroughly sympathetic with, any normal desire expressed by story heroes. And the screen writer should remember that the thing desired must be shown gripping the emotions of the character so that he cannot escape, while, at the same time, he drives forward with all his force to dominate and possess the thing which controls him.

Satisfaction

Satisfaction, like desire, is composed of compliance and dominance, with compliance, curiously enough, the controlling element. If you watch a young infant taking his nourishment from a bottle, you can easily observe a transition from eager, restless activity, expressive of desire, to quiet, relaxed enjoyment of the last portion of the meal. This is the normal transition from desire to satisfaction.

As the child's dominance over food increases, the food controls his activities more and more from within. Once

the food is taken within the digestive tract, it stimulates a tremendous number of nerve channels within the body and brain. These nerve excitations result in shifting the blood supply from the outside of the body to the stomach and the inside organs. Of course, all this is a provision of nature for the adequate disposition of the food. But it also brings about the most complete compliance of the individual with a foreign substance which it is possible to experience. Think for yourself of the experience which you have after the first sharp hunger pangs are appeased. You become genial, expansive, and yield with comparative ease to the suggestions of your friends. You laugh heartily at jokes which seemed pitifully feeble before you started eating. The business world is well acquainted with the technique of feeding a customer before trying to sell him a heavy bill of goods. The same goods which he would reject without a second thought while hunger controls him, he will readily buy at the end of a satisfying meal. The food within him has compelled him to greatly increased compliance, not only with itself, but with his entire environment.

The dominant element in satisfaction expresses itself by completely controlling the food which has been taken within the body. Dominance shows itself by resisting and gradually eliminating the hunger pangs which have previously controlled the stomach. As desire progresses to satisfaction, the control which uneaten food has previously maintained over the hungry individual is diminished. When complete satisfaction is experienced, desire for food no longer exists. The initial control which food had over the hungry person has been dominated and is now passively resisted. On the emotional level, the sat-

isfied person feels a certain self-sufficiency which frequently makes him complacent and self-satisfied.

The emotion of satisfaction must be handled with considerable care and finesse in the building of stories. The transition from desire to satisfaction must be much more dramatic in stories than it is in real life, to hold the interest of the average audience. Desire must be kept unsatisfied up to the last possible moment. Satisfaction must then be complete and sudden. This abrupt transition from one emotion to another in the form of a natural emotional climax is known as "drama," without which a story will have little appeal to any editor.

The "tag" of a motion picture follows the final climax and is appended to complete the satisfaction of all the sympathetic characters in the story. Suppose, for instance, that the hero has been tried for murder and acquitted. Following this climax, a tag may be used, showing the satisfactory results of the trial. The hero's sweetheart is eager to marry him. His father, who had cut him off without a nickel, prays the boy's forgiveness. His employer, who had believed our hero guilty of the murder, admits his mistake and offers the boy a far better position. The tag might well be called the satisfaction epilogue.

Though it is not popular with editors, it has been our experience that the average audience enjoys the tag, provided it is not too prolonged. The audience gets its maximum enjoyment from any story that presents each desire early in the picture and works them out to satisfaction in the end.

As an experiment, *The Love Trap* was shown without a "satisfaction tag" to a group of 1,000 students at the

University of California. In the early part of the picture, the rich young husband's family snubbed his wife, a poor young chorus girl. They attacked her reputation and attempted to disrupt the marriage. The climax of the picture showed the complete defeat of the family by the girl, who not only cleared her reputation but put to rout the greatest social snob of her husband's family. The picture, in its then existing form, ended abruptly at this point. No tag was shown. The audience was unsatisfied at being left to imagine how the girl enjoyed her new-found social prestige and how the snobbish family humbled itself before her. They wanted to see the girl's final satisfaction depicted on the screen. It is advisable, therefore, in writing stories for the screen, to tie up the elements of the story in a final scene of satisfaction, or at least to portray a definite solution of some sort which will leave the emotion of satisfaction in the minds of the audience.

It must also be remembered that the completely satisfied person is not regarded as particularly attractive or admirable in the general opinion of the public. He does not seem to possess the finer human attributes. But, though the audience always demands some satisfaction for the screen characters, they prefer this satisfaction to be taken "with a grain of salt."

In real life, satisfaction follows desire and is the completion of every human aim. People have had this experience and therefore demand it in stories. Any definite solution of all the problems or difficulties of the screen story, pleasant or unpleasant, gives a modicum of satisfaction to the spectators.

A notable exception to this rule, however, is found in a rare type of story which has never been successfully

screened. It is well illustrated by Frank R. Stockton's *The Lady or the Tiger*. At the end of this story, the hero is thrown into an arena by a tyrannical king. There are two doors leading out of the arena, one of which the hero must open. Behind the first is the lady of his choice. And behind the other is a man-eating tiger. The story ends with the hero in the arena, and the simple query, "The lady or the tiger—which?"

Here, intellectual desire for a solution is substituted for the more usual emotion of satisfaction in some definite dénouement. Intellectual desire underlies interest in problem plays, cross-word puzzles, some contests, and the average detective story. In all cases, however, intellectual satisfaction, though delayed, is finally achieved. The able detective always solves the crime problem, no matter how complex and baffling, in the last installment of the serial. And in motion pictures, complete satisfaction, even of intellectual desires, must be shown at the close of each successful picture.

Passion

In the old literary days of psychology, no differentiation was made between passion and captivation. In fact, not only were the two aspects of erotic experience confused in fiction and other literary works, but both emotions were described by the totally erroneous words, "sex emotion."

"Sex" means a physical difference between two types of organisms, male and female. The term sex emotion could only be applied properly to an emotion which has its origin in the sex differences of body or mind. Love, or erotic emotion, is quite the opposite, in this particular.

Both types of erotic emotion, passion and captivation, are identical in quality in persons of both sexes. It is ridiculous to suppose that the passion felt by a woman is in any way different from the passion felt by a man. Or that the captivation emotion of a woman is a different sort of feeling from the captivation experienced by a man.

The very fact that erotic excitement experienced by both sexes has been given an identical name, sex emotion, proves that the emotional excitement experienced is thought of as identical in men and women. If, then, passion and captivation, like desire and satisfaction, are emotions felt by both sexes, they cannot properly be termed sex emotion.

The word "erotic" is derived from the name Eros, the Greek god of love. Throughout our discussion, therefore, we shall use the term "erotic emotion" rather than the more ordinary but erroneous term sex emotion.

All through literature, ancient and modern, we find descriptions of love pursuit and love capture, in most of which woman is the person pursued and man is the lover pursuing. Most writers have assumed that when woman runs away from man, she feels the more passive sort of erotic excitement, while man feels the active, capturing excitement. But a few authors of more intellectual insight, such as George Bernard Shaw, have observed that woman, though she runs away, is really the captress, while man, for the very reason that he is led on by her fleeing charms, is the captured lover. This analysis represents the true psychology of the situation. Erotic capture is not made by dominant destruction of an opponent's resistance. It is accomplished by irresistible attraction. Woman's proverbial love tactics, in running away from

man, are merely designed to enhance her charms and make them so irresistible that her lover will leave all other pursuits of life for her. Love is an attraction. The fleeing woman is like a magnet, and her pursuing lover a bit of soft iron attracted irresistibly toward the feminine magnet.

Experimental studies have shown that man's erotic emotions contain a prevailing element of passion, while the erotic excitement of woman is largely of the captivating variety. Passion is the self-surrendering aspect of erotic emotion. Captivation is the active, attracting aspect. With the idea of the attracting magnet in mind, let us think of captivation as the conscious pull of the love magnet, and passion as the conscious yielding of the soft iron to the magnet's attraction.

Passion is a complex emotion made up of submission and inducement. A man sees a beautiful dancer. He feels irresistibly excited and stirred by her grace and physical charms. At one and the same time, he wishes to give himself to this beautiful woman utterly, to throw himself at her feet and beg her to use him as she will, and to seize her, to possess her, and to make her subject to his will. The first set of impulses are all submissive. The second group of emotional feelings are inducive. The excited male wishes both to submit to and to induce the dancer, and he experiences that peculiar excitement, erotic emotion.

Captivation is the control which beautiful women have always exercised over men. Men who have yielded themselves to woman's erotic charm feel passion with a predominant element of submission. Woman's body is adapted by nature to control the love relationship, while

man's is designed to submit to woman throughout the love experience.[1]

Passion must be thought of as preponderantly a male emotion. Its controlling ingredient is the wish to submit completely to the lover's control. The longing of passion is a longing to be subjected, to have the lover accept the homage and service of a love slave. It springs from the predominant emotion of submission, which overrides and controls inducement in the passion mixture.

So far as the writers know, the emotional nature of passion has never been clearly shown in literature. Both character studies and plots depicting passion have nearly always confused it badly with the active phase of erotic emotion—captivation. The heroine has been shown at one time leading her man on, teasing him with every love device known to the daughters of Eve, and altogether bewildering him with the power of her love charms. Again, she may be shown as yielding herself completely to the dictates of her noble lord and master, throwing herself literally or figuratively at his feet, and accepting his superior love leadership in the consummation of their love union. This confusion has spoiled many a good story.

Women have laughed up their sleeves at the love hokum wished on the world by male authors who make the male lover superior in affairs of the heart. During the Victorian age, especially, love stories depicted the heroine as a clinging vine, a yielding violet, and a sweet, obedient housewife carrying out her lord's commands. Of course, women who followed this formula in real life

[1] W. M. Marston, *Emotions of Normal People* (Harcourt, Brace), 1928.

invariably lost their husbands to other women who did not. But this was regarded as one of the regrettable "ways of the world." It was one of those instances in which woman's ideals of love somehow failed of fulfillment in a man-ruled universe. The trouble was that many women failed to understand the world as it is. The dancer, the show girl, the night club entertainer, in fact, the natural female captivator, wherever she might be, got her man and held him. Nature designed it this way.

Woman possesses the superior love power. When she cuts off this magnetic power and tries to make herself into a bit of soft iron to be attracted by what little love magnetism the male possesses, she fails miserably. Men are not much interested in exercising captivation. They soon tire of it. When any woman becomes a clinging vine and tries to submit predominantly to a man, she forthwith loses her grip on him. Sooner or later, he will yield to the power of some other woman who continues to exercise her captivation.

All these facts illustrate the psychological law that passion is predominantly a male emotion, and that submission in love belongs to the man and not to the woman. This point requires a great deal of emphasis in talking to prospective writers for the screen. This is an age in which Victorian hokum has gone out of date. The modern girl has emerged from her Victorian seclusion. She has repudiated the silly clinging vine formula of the last century. She is determined to exercise her captivation powers over men, frankly and freely, when and as she will. To do this, she has found it necessary to earn her own living and to compete with men in the economic field.

But in writing stories of modern girls who have thus emancipated themselves from the economic seclusion of preceding centuries, writers should not forget that the predominant female drive is still the drive of captivation. The screen heroine who merely makes a success of her career will never attract a large number of box-office patrons.

It is an excellent modern touch in a screen story to show the heroine succeeding at some independent occupation. The one thing that counts, however, in what the girl does with her success, once she has attained it, is the degree to which she exercises her captivation with the power and independence at her command. Make your screen heroines modern young women. Make them conscious of the fact that woman is, and always has been, the love leader in affairs of the heart. Make them conquer the world, or at least enough of it to give them a good living. Then show how their economic conquest enables the girls to captivate the men of their choice.

It may safely be said that no successful screen story can contain a universal emotional appeal unless it is highly flavored with erotic passion. The two emotional elements of passion should be clearly shown. The passionate lover should show evidence of a wish to possess and claim for himself the attention and affections of his lover. That is the emotion of inducement. But the passionate lover should show even more clearly a mad impulse to give himself, body and soul, to the service and control of his beloved. This is the emotion of submission. The clever blending of these two types of action, with the submissive actions predominating, convey to the moving picture audience the emotional effect of passion.

Pure passion on the screen is not censorable, nor can it offend the taste of any normal person. An excellent example of this effect of passion, properly depicted, may be found in *The Pagan,* in which Ramon Navarro played the title part. The total effect of Navarro's passionate adoration of the little visiting half-caste girl was sweet, wholesome, and altogether entrancing to the most staid and conventional motion picture audience.

The emphasis which we have heretofore placed upon passion, as a predominantly male emotion, is not intended as an intimation that women do not experience it in real life. Of course they do. Woman's passion is probably much more profound and all-controlling in her life than is man's. Yet, the normal woman, successful in love affairs, quickly passes from the passionate phase of erotic experience to the captivating aspect of that same love relationship. Woman's passion should be shown as it occurs in real life at the beginning of her love affair. It may persist throughout the affair, but it quickly becomes subordinate to captivation.

In everyday terms, when a young girl gets a "crush" on an older girl, her teacher, or some handsome young man, she experiences pure passion. For the time being, she does not even dream of controlling in any way the object of her passionate adoration. It is beyond her thought that the beautiful senior or the handsome college youth should yield to her in any way or return her adoration. She begins, perhaps, to dress like the older girl, to adopt her mannerisms of speech and action, to follow her about, and even to send her flowers and "crush" notes. If the object of her "crush" is some college boy, she perhaps makes herself thoroughly obnoxious to him by

appearing conspicuously in his path upon every possible occasion. The boy's reaction of disgust and annoyance to these manifestations is a complete demonstration of the failure of passion as a love technique for girls in affairs between the sexes.

The adolescent girl experiences these same passionate feelings, because her body has just developed into the beginning of its love capabilities. She has grown, in short, into the first stage of erotic emotion. A year or two later, we find her quickly following her "crushes" with equally violent captivation attacks upon the object of her admiration. She makes a conscious effort to control the affections of other girls, for whom she feels an initial passion. Young men she begins to subjugate by means of her personal charms. If she feels a particular passion for a given young man, she immediately makes a special and femininely ingenious campaign to capture and control his attention. In short, girls at this stage have passed to the second and culminating love growth. They are now capable of both passion and captivation. True to their feminine nature, they quickly follow each attack of passion with a greater and more prolonged period of captivation.

In describing the love affairs of older women, this same sequence of passion and captivation should be observed. The passion which a woman feels for the man of her choice must predominate very briefly at the moment when she "falls in love." Her passion thereafter continues in the form of secret, but none the less sincere, attention to her man's happiness and well being. But as far as her love relations to him are concerned, her passion is always kept subordinate to the captivation which she exercises

over him, if the love affair depicted is to be exciting, colorful, and stimulating to the screen audience.

With the male lover, passion comes first in sequence, just as with women. But the passion phase is greatly prolonged. The courtship, the long effort to succeed for the woman's sake, the faithful following out of her love commands, and the process of passionate striving to win her love favor is conventionally prolonged throughout the entire story, with only a very brief climax of captivation, when the woman finally comes to his arms. The successful end of every love story, or the "clinch," as it is colloquially termed in motion pictures, represents a mutual and complete captivation between two successful lovers. Even in the final embrace, the predominance of captivation power is retained by the woman, as illustrated by the pictures of Greta Garbo, the magnet irresistibly attracting her successful lover, John Gilbert. The passive magnetic rôle of the woman always holds the balance of captivation power, while the man still shows a predominance of passion. This is a successful love affair in real life. Depiction of love relationships of precisely this sort has made famous not only the pair of lovers mentioned, but countless other actresses from the days of Theda Bara to the modern vogues of Joan Crawford and Clara Bow.

Experiments have shown that both men and women in audiences experience sympathetic passion with the male lover in such scenes, as his passion is drawn irresistibly forth by the woman love magnet.

Captivation

The general definition of captivation, "to take captive by charm," aptly describes the process of love capture,

or the emotion accompanying erotic enslavement of one individual by another. Captivation, as experienced by men toward women, is a mixed emotion largely made up of dominance. In its purest form, however, it is distinctly a feminine characteristic.

Did you ever stop to ask yourself why a woman's body and personality should be able to control a man so completely, and arouse in him self-surrendering passion? And did you ever consider the difference between love power and force power? Negro slaves in the early days of this country, and Greek and Roman slaves in ancient times, were controlled by force, just as are convicts and other people legally compelled to work without recompense for dominant masters. Their emotional response is one of compliance. They work to avoid unendurable suffering which would otherwise be imposed upon them. They are slaves of force power.

Love power is of precisely the opposite nature. The only way in which one person may exercise love power over another is to offer him greater pleasure, through his submission to the controlling person, than he could experience in any other way. Woman exercises this type of captivation power, which is a part of her very nature. Her body and her personality offer man greater pleasure than he could obtain in any other experience. He therefore yields to this attraction and control voluntarily, and seeks to be thus captivated. This process of submitting to a captivatress is, moreover. accompanied, as we have seen, by erotic passion.

The process of captivating, or gaining love control over, a man is pleasant in itself to the captivatress, who experiences the emotion of erotic captivation. In order to

control a man by offering him pleasure, he must be induced. He must be convinced that the woman's power to give him pleasure is greater than his own ability to obtain it in another way. The emotion of active inducement on the part of the woman, therefore, is the principal element in captivation. But if she is to feel erotic excitement in the process of attracting man, she must also wish to be controlled by her prospective captive, at least to the extent where he fixes and holds her captivation powers on himself. The woman must feel an irresistible urge to capture some particular man and to exercise upon him the utmost of her inducement power. This is one form of submission. She wishes to induce him at the same time that she feels compelled to submit to his attraction for her. The resulting combination of inducement and submission gives the erotic quality to the compound emotional state, just as it does in the case of passion. In the emotion we are now considering, however, inducement is more active and compelling, constituting the controlling element of captivation.

One of the oldest techniques which women have employed in this process is the "come-chase-me" attitude, a primitive form of coquetry. A girl runs away from a man, expressing by this act the apparent relationship of being weaker than her pursuer. Yet, she manages always to keep just out of his reach. This indicates, as a matter of fact, that it is she who possesses the superior strength. The longer the man pursues, and the more successfully the woman eludes him, the more passionate does the pursuing male become.

The moment the woman surrenders, she confesses herself weaker than the man. His magnetic attraction has

proved greater than hers. When this happens, she feels an elementary passion of self-surrender, and the man experiences a moment of captivation mixed with triumphant dominance. Every woman knows that this moment is very brief. Man is not made to feel prolonged captivation, just as woman cannot experience passion for a man for any great length of time. Therefore, the only way these emotions may be prolonged is for the woman to keep from being caught. Thus, she remains the man's superior in their mutual love game, and both are excited and happy. Modern wives are beginning to discover that this process of keeping just out of reach is persistently useful throughout married life.

Other forms of captivation, between members of opposite sexes, may be shown on the screen in social situations, in which the woman refuses favors to her lover, despite his passionate pleas to become the accepted favorite of the woman he loves. In this situation, the woman again expresses her love superiority.

There is a still simpler type of physical struggle between members of the same or opposite sexes. This is a form of physical captivation observable in every-day life. A man tries to pull a girl into the water as they romp about on the beach. This form of captivation struggle is disguised under the mask of playfulness or mischief, which is another form of dominance.

The writer must constantly remember that while dominance expressed by one person to another is socially acceptable as a form of human behavior, the natural erotic captivation struggle between men and women is socially taboo by the decree of modern civilization. Any use of captivation contest in stories or on the screen, therefore,

must be disguised by the addition of some less normal emotional expression.

Studies of college students have proved that a certain amount of erotic captivation is normally felt during physical struggles between members of the same sex. This seems to be more generally true, however, of girls than of boys. In most colleges, there is some form of subjection of freshmen by upperclassmen. Frequently the freshmen are given a chance to struggle against their subjectors and to escape some part of the resulting hazing if they are successful. In one college it was the custom for the sophomore and freshmen boys to prevent each other from attending their respective class dinners. They would attempt to capture their opponents bodily, tie them up, and keep them confined until the dinner was over. These struggles were accompanied by a certain amount of captivation emotion, according to the results of psychological findings.

At this same college, the sophomore girls compelled the freshmen girls to attend a "baby party." At this affair, the freshmen were forced to dress in baby costumes, were physically confined in various ways, and were put through a series of stunts at the command of the sophomores. A careful study of the emotional reactions of the girls of both classes showed that the freshmen gave the baby party experience a high rating of pleasantness, and that they experienced a good deal of pleasant passion in the process of being subjected by the sophomores. The sophomores, on the other hand, apparently experienced captivation excitement during their physical struggles with the younger girls.

In writing stories for the screen, physical struggles of

this type may be used, if the captivation element is sufficiently disguised by some established social custom, such as that of college hazing, or the training of recruits at military schools, the discipline of girls in colleges, and so on. Erotic captivation is one of the most intensely pleasant emotions in the whole of human experience, and any motion picture which arouses a sufficient amount of this emotion in the audience is bound to be a box-office success.

The most successful and the least successful pictures of a large moving picture company have been studied for four years, with a view to discovering the reasons for their success or failure. This analysis shows, astonishingly enough, that captivation, disguised in many ways, was the predominant emotional appeal in more than ninety per cent of the successful pictures. And this appeal was totally absent from all of the failures.

One of the most popular pictures ever released was *The Hunchback of Notre Dame,* which has been reissued twice, with extraordinary returns both times. Its chief emotional attraction is disguised captivation. The Hunchback is subjected to public punishment before the crowds of Paris. He is chained to a revolving platform, stripped to the waist, and whipped before a gloating mob. Then the lovely young heroine of the story is similarly exhibited and subjected. Dressed only in a chemise, with her hands tied behind her, she rides to the cathedral in a cart. She is made to kneel on the church steps, still tied, while she is subjected and punished for witchcraft. She is rescued by the Hunchback, who carries her up the side of the cathedral.

The theme of public exhibition and punishment arouses a strong, disguised captivation emotion in the minds of

the audience. Without a doubt, this accounts for the remarkable popularity of *The Hunchback of Notre Dame* and pictures similarly successful, as, for example, in the case of *A Daughter of Neptune.* This screen story combines the elements of captivation, in scenes showing a slave girl, and the cruelty of a tyrannical king; and, on its release, it met with the enthusiastic approval of audiences.

Expressions of Compound Emotions

The only way to understand the expressions of compound emotions is to know the behavior which accompanies the elements of each. The appropriate expressions of two or more elemental emotions are combined in various ways, resulting in many types of expressive actions. There are, of course, many more combinations than can here be described.

In the following records, we attempt to present clear specimens of everyday behavior with which the story writer must become familiar. Here is the raw material of dramatic situations.

Desire

A. *Gross Behavior*

I. Illustrations

a. This emotion is composed of compliance and dominance. It is an active, aggressive, yet controlled emotion, with dominance over the object desired as the final purpose of action. Suppose a baby desires a flower standing in a vase at some distance from him. First, we notice that the child's attention is riveted upon the flower. He looks at it and perhaps points toward it. This movement expresses his attitude of compliance with the object of his attention to the exclusion of all else. The flower controls the baby. Quickly he begins to creep toward it. He reaches the table whereon the

flower vase rests and pulls himself up beside it. Then he grasps the vase and pulls it over. The flower falls out, and he picks it up quickly, waving it about in his hand. The object of desire has been accomplished. All these movements are particularly expressive of dominance. The baby is seeking to control the flower, and finally succeeds.

Throughout the second series of movements, however, we must remember that the flower's control over the baby persists. His attention never wavers. He spurns toys, and even candy, held out to distract him. His mind and body are under the thrall of the flower's attraction. Thus, throughout the actions we have described, both compliance and dominance are expressing themselves continuously.

b. We see an adolescent girl poring over the pages of a fashion magazine. She has seen the picture of a dress which she believes would greatly add to her ability to compete with other girls in her set. She gives up all other duties and occupations for the time being. With the fashion magazine in hand, she goes to consult her mother. She begs her mother to get the dress pattern and make the gown for her. These actions are dominant, looking toward the ultimate end of possessing the object of desire. Let us suppose her mother refuses to make the dress. Still it controls the young girl's mind. She still desires it. She decides to give up her own free time to making the dress. These actions express further compliance with it. Eventually, the girl procures the materials and makes the dress according to the pattern which she admires. Finally, she actually possesses the dress and wears it. This behavior expresses dominance gradually progressing toward success.

Throughout these expressions of desire, we may note that compliance with the object of desire is strongest at the beginning of the emotion. Compliance is then gradually replaced by dominance, until, at the end, dominance stands nearly alone in the individual's emotional expression. Actions expressive of desire progressing normally toward satisfaction must, therefore, show this gradual transition from overwhelming compliance,

mixed with a little dominance, to overwhelming dominance, mixed with a little compliance.

c. A film producer reads in *Variety* of the first successful box office returns of a rival producer's picture, called *Girls and Gods*. He immediately feels a desire for a similar box-office success. He shows it thus:

First, he presses a call button on his desk. A stenographer enters. He orders her to summon the story editor. He talks eagerly with the story editor, telling him to get a story as nearly like *Girls and Gods* as possible. He pounds his desk and insists on quick action. Then follows a long series of actions on the part of the producer, which may last intermittently over several months. He calls up a story editor. He summons writers. He signs contracts with directors and producers. He consults with studio critics, actors, and executives. He communicates with his sales department and his publicity men. At last, the picture is ready for release. The producer arranges a stupendous première. He makes personal efforts to induce all the screen celebrities to attend. He spends a great deal of money in advertising and other attendant arrangements. The opening night is a success. The box-office returns of the picture are big all over the country. The end of desire is obtained.

Every action and facial expression throughout this extended series of acts, showing eagerness, aggressiveness, and purposeful action toward obtaining the object of desire, expresses both of the elements of the compound desire emotion.

II. Physiological Expressions

In the combination of physiological expressions of desire, the bodily symptoms of dominance prevail throughout, though modified decreasingly by the bodily symptoms of compliance.

B. *Subtle Behavior*

I. Illustrations

a. Facial expressions showing eagerness, longing, purposive seeking of the desired object, and involuntary direction of attention toward the desired object all con-

stitute more subtle expressions of desire. Expressions of regret, envy, and disappointment upon seeing another person in possession of the desired object also constitute indirect expressions of desire, complicated by a certain thwarted or defeated element of emotion. Small movements of the hand or body toward the desired object, or sudden lack of interest in other things when the object is near, also express the emotion.

II. Physiological Expressions

a. The same type of combined dominance and compliance in actions of the body, as were described under gross physiological expressions of these elements, occur here. Bodily dominance sometimes predominates throughout, though modified intensively by changes symptomatic of compliance.

Satisfaction

Satisfaction consists, as we have already noted, of a mixture of compliance and dominance, with compliance more active and dominance more passive than in the emotion of desire. The baby, having grasped the flower, waves it about for a moment or two. Perhaps he puts it near his face or into his mouth. He may merely squeeze it with one hand, or pluck out some of its petals. Gradually his attention to the flower diminishes, and his grasp upon it relaxes. Eventually, the flower falls from his hand, and he turns to some other activity.

Just before he drops the flower, his satisfaction has reached its height, and thereafter the emotional satisfaction from possession of the flower begins to be replaced by other emotional reactions. In the child's expression of satisfaction, we can clearly trace compliance actions and dominance actions in combination. In this case, however, dominance is strongest and is gradually replaced by compliance. The child, when he first grasps the flower, expresses dominance in violent movements of the arm, waving his possession back and forth, striking it against the floor and table. The flower controls his attention and interest, but he is nevertheless at the height of his triumphant dominance of it. Gradually, the flower itself controls his actions more and more. He ceases to wave it, and tries to smell it or to press it against his face, thus increasing the sensations caused by the flower. He grasps it, squeezes it, and perhaps sits looking at it gravely and inactively after his experi-

ments with it have been completed. At this moment, he is expressing rather complete compliance and a comparatively small amount of passive dominance.

Taking the entire series of desire-satisfaction emotions in order, therefore, we begin in desire, with a great deal of compliance gradually replaced by dominance. At the climax of dominance over the object of desire, the emotion of desire begins to change into the emotion of satisfaction. With this change, the emotion of dominance again decreases, and is gradually once more replaced by compliance.

The emotional quality and expression of satisfaction is chiefly distinguished from that of desire by the fact that dominance is increasing throughout the desire, while compliance is increasing throughout the emotion of satisfaction.

A. *Gross Behavior*

I. Illustrations

a. A Western ranch owner, coming in from a day of hard work on the ranch, eats a tremendous dinner. During the latter part of his meal, he eats more and more slowly, chooses his food with greater care, and finally sits passively, with his eyes half closed. In a few minutes he is sound asleep. Compliance has triumphed, and satisfaction has expressed itself to an ultimate degree.

b. A woman buys herself a new hat. The hat arrives, and she tries it on. Its color does not blend with the dress she is wearing, so she changes her dress. Then she looks at herself in the mirror for some moments. She tries to think of a bit of jewelry which would enhance the effect of the hat, and searches for a certain necklace. At last she finds it and dons this, also. Then she looks at herself again for fifteen or twenty minutes, turning this way and that, perhaps moving the hat to a slightly different angle. At last she is satisfied, and looks at herself in the mirror passively for a moment or two without making any further adjustments. This is the climax in her satisfaction, with compliance almost pushing dominance out of the picture.

c. An art collector acquires a new painting. He orders it hung in a certain light, steps back and looks at it from all angles with eyes open, half shut, and

nearly shut. He then orders the painting taken down and hung in a slightly different position. At last, he stands passively in front of his new art treasure, or perhaps draws up a chair in front of it. He may thus sit, passively lost in contemplative appreciation of the painting for several hours. This is an extreme development of expression of the emotion of artistic satisfaction.

II. Physiological Expressions

a. Complacent, passive, self-satisfied facial expressions; inert, indolent, self-assured postures of the body, such as slouching down in an easy chair, with muscles relaxed, or reclining lazily on a couch or hammock. Small gestures of self-sufficiency, such as a condescending wave of the hand or nod of the head, indicating approval or permission to do something.

b. In simple bodily satisfaction following consumption of food, the bodily symptoms of dominance are never wholly supplanted by the bodily symptoms of compliance. After eating a hearty meal, the systolic blood pressure may drop ten or twenty millimeters below its level prior to taking food, but its final level is still considerably higher than that shown during states of inactivity prior to the onset of hunger. Saliva and gastric juices continue to flow heavily for twenty minutes or more after the food has been eaten, and digestive processes continue extremely active for half an hour after eating, and more active than usual for an hour or more after the meal. This flow of gastric juices and increase of digestive activities must be regarded as bodily symptoms of compliance in satisfaction.

Passion

Passion combines submission and inducement, with submission in the ascendancy. We may take the case of a young man who goes to see a Ziegfeld revue. The little blonde girl at the end of the front row attracts him greatly. He begins to feel excited about her. He seems irresistibly drawn to her, and he tries to attract her attention during the ball-throwing scene between the

chorus girls and the audience. Failing to attract her attention in this way, he leaves his seat between the acts, goes around to the stage door, and sends the girl his card with a note scribbled upon it. No results. During the second act, the boy is more excited than ever, and manages to catch the eye of the girl who is exciting him. He believes she is smiling at him. He rushes out of the theater and sends her flowers, with a note begging her to have supper with him after the show. This type of behavior goes on perhaps for several weeks, until finally the girl consents to meet him. During the entire period which intervened between his first sight of the girl and his final meeting with her, the boy's passion for her mounted steadily and he devoted more and more of his time and attention to the task of winning her consent to see him.

Throughout the progress of this affair, we see actions expressing both inducement and submission, with submission gradually increasing and replacing inducement. The girl's control over his action, when she first attracted him, was very slight. He perhaps smiled at her and spoke admiringly of her beauty to his friends. But, for the most part, the boy felt in the superior position of controlling the girl. She was a performer on the stage, whose duty it was to dance and entertain him. Under these circumstances, men feel themselves superior to chorus girls, since they are actually controlling the girls' actions much more than the girls control the behavior of the men. When, however, a man attempts to apply this general inducement superiority to a particular girl, he quickly finds that their relationships begin to be reversed. The girl becomes more and more a controlling power between them. More and more of the man's actions are governed by his submission to the girl, and she becomes less and less subject to his commands as she realizes her own attractive power over him. Eventually, if the passionate response is carried far enough, the man is willing to throw himself and everything he has at the girl's feet in passionate self-surrender. At this point, submission has reached its climax, and inducement has diminished almost to the vanishing point in the man's behavior. This is the climax of passion.

A. *Gross Behavior*

I. Illustrations

a. King Louis XV of France, during his first infatuation for Du Barry, devoted more and more of his time and attention to his fair inamorata. At the height of his infatuation, he is said to have neglected affairs

of state of the utmost importance in order to be with his beautiful mistress.

b. A freshman college girl feels a passionate attraction for a sophomore girl in the same school. She says she "has a crush" on the older girl. She sends flowers to the sophomore, writes little notes to her, sends her candy. Gradually, she begins to imitate the style of dress of the older girl, cuts her hair similarly, imitates her handwriting. If the sophomore is studious, the freshman begins to take an active interest in her studies. Or, if she is frivolous, her admirer tries to emulate her frivolity. This process may go on until the freshman girl becomes almost wholly and ludicrously absorbed in her attempt to model herself and all her activities in imitation of her "crush." In following the course of such "crushes," it is easy to see how the various expressions of submission increase cumulatively, replacing inducement.

B. *Subtle Behavior*

I. Illustrations

a. The classic description of the subtler expressions of passion is contained in the "Second Sapphic Fragment." Sappho's description of her own bodily expression of passion is remarkably accurate, from the psychological point of view:

For when I see thee but a little, I have no utterance left, my tongue is broken down, and straightway a subtile fire has run under my skin, with my eyes I have no sight, my ears ring, sweat pours down and a trembling seizes all my body; I am paler than grass, and seem in my madness little better than one dead.[2]

II. Physiological Expressions

a. Lowering of the eyes, bowing the head, turning the face away, either sudden flushing or sudden pallor of the face may be regarded as common expressions of female passion and adolescent passion of both sexes. Any bodily posture or attitude of bashfulness should also be included in this group.

[2] H. T. Wharton, "Second Sapphic Fragment," *Sappho,* reprint of fourth edition (London, 1907), p. 65.

b. Adult male passion expresses itself more frequently in self-abandoning attitudes and gestures, and longing expressions of eyes and face. Turning the head to look at a woman in such a way as not to be offensive to her is an effective minor or subtle expression of passion. In Oriental civilizations, slave girls are taught to walk always on their toes with bowed heads, eyes directed toward the floor, hands held in a certain prescribed position at their sides.

c. In a case recently brought to our attention, a modern young woman, meeting for the first time a handsome man, reported that she experienced almost identically the bodily expressions of passion described by Sappho about 600 B.C. The young woman had never read Sappho, as far as we could learn.

Sitting down to dinner with the man, the girl found her mouth so parched that she drank six or more glasses of water. She felt no appetite or tolerance for food, and the sight and smell of it on the table made her feel nauseated. This interference between passion and appetite, as far as bodily symptoms are concerned, results from the fact that passion (like submission) expresses itself predominantly by nervous excitement and determination of blood to the external genital organs. This reaction within the central nervous system tends to inhibit all activity in the nerves and organs concerned with digestion.

Captivation

Like passion, captivation is a compound of submission and inducement. Captivation, however, starts with submission in control, and gradually shows an increase of inducement at the expense of submission.

A. *Gross Behavior*

I. Illustrations

a. Let us take up the case of Cleopatra and Mark Anthony at the point where we dropped it during our discussion of submission. Cleopatra, as we have seen, changed her style of manner very radically as an expression of her submission to Mark Anthony. As far

as we can judge from Cicero's letters and other contemporary sources of information, Cleopatra began her affair with Anthony as a result of an extreme passion which he had aroused in her during a casual meeting some years previously. From this beginning, Cleopatra made herself more and more important in Anthony's life. She gave him lavish and extravagant parties under the Egyptian moon. She stimulated him with rare wine. Her own costumes, though scant, were marvels of beauty and extravagance. She prepared a banquet hall on her royal barge on the Nile, with a carpet of rose petals a foot thick. In every way she catered to Anthony's tastes and habits. Gradually the woman enslaved her lover. Anthony sought her advice in everything, and gradually gave up his Roman friends and associates for the company of the beautiful Egyptian queen. This process went on until Cleopatra controlled Anthony completely, according to historical records. She charmed him with her body and personality until he could not be happy away from her presence. She persuaded him to conduct his military campaigns according to her suggestions and to break definitely with his wife, Octavia.

Finally, Cleopatra persuaded Anthony to take her with him to the battlefield in Asia Minor. She remained in his tent with him throughout the campaign, despite the pleas and threats of Anthony's Roman officers, who exerted every possible influence to break up his affair with Cleopatra. At the height of the battle of Actium, Cleopatra deserted Anthony and went back to Egypt with her own ships. Anthony learned that she had left in the midst of battle. Despite her obvious desertion in the face of danger, Cleopatra still controlled his emotions, and he immediately set sail after her. He arrived in Egypt and once more sought to live with her. The famous captivatress by this time, however, was through with her Roman lover. She refused to see him. Eventually, under military pressure and defeat, Anthony retired to a castle in Egypt as near Cleopatra as she would permit. When all was lost, Anthony fell on his own sword in true Roman fashion. But the place which he chose for this final act of

Roman expiation was significant. It was beneath the window of Cleopatra's apartment, to which she had retired as a last refuge against the invaders. Tradition tells us that Anthony, with blood streaming from his heart, was drawn up the side of the castle on ropes, to die in Cleopatra's arms. Thus, to his last breath, was Mark Anthony controlled by the captivation of Cleopatra.

Throughout the course of Cleopatra's affair with the infatuated Roman, we see her actions expressing more and more inducement and less and less submission. Having conceived an initial passion for Anthony, she proceeded to exert herself in every possible way to induce in him a similar passion for herself. In giving lavish entertainments and erotic parties to the handsome Roman, she still expressed a great deal of submission to his tastes and interests. Gradually, however, she exercised over Anthony's actions a more complete control. She induced him to give up his own military plans and to follow her own schemes of world empire. She induced him to submit to her leadership in every detail of life. Her own submission, by this time, was obviously on the decrease. When, at last, she had induced Anthony to sacrifice his every hope and ambition to her dictation, her captivation activities reached their climax. Thereafter, Anthony's blind passion for her, up to the very moment of death, represented merely a psychologically inevitable result of Cleopatra's successful captivation. Her inducement was supreme, and her submission had disappeared altogether. At this moment, her captivation emotion, with its corresponding expression, was finished.

Throughout this expression of captivation, inducement gradually replaced submission. Taking the passion-captivation series of emotion experiences in their order, we find passion beginning with strong inducement and ending with extreme submission. Captivation begins at this point, with submission maximally strong, and progresses to the point where inducement almost wholly replaces and controls submission.

While passion and captivation, therefore, are composed of the same elementary emotions, we find that

submission increases throughout passion, while inducement similarly increases throughout the emotion of captivation. It is of interest to note that while the appetitive series of desire and satisfaction ends with the predominance of a passive emotional element (compliance), even to the point at which the wholly satisfied person falls asleep, the erotic series of passion and captivation naturally becomes more and more active, ending with extremely aggressive inducement activities in complete control.

B. *Subtle Behavior*

I. Illustrations

a. Girls' facial expressions and gestures, plainly conveying the meaning "come on over," are expressive of captivation. Winking the eye, beckoning with finger or head, inviting glances thrown over the shoulder, short skirts or one-piece bathing suits intentionally designed to excite men while still holding them at bay, and various subtle exhibitions of the female body also express captivation. The average man expresses captivation only in a gross way. Men of the Valentino type, however, show this emotion by much the same set of subtler expressions as those used by women toward men. The male captivator, however, expresses his captivation in a slightly more forceful and openly expressive manner. His bodily attitude of independence and languid indifference to female charm is in itself captivating behavior.

II. Physiological Expressions

a. The physiological expressions of captivation are combinations of those expressed in inducement and submission, with inducement sometimes prevailing.

Unlike the combination of dominance and compliance between desire and satisfaction, the bodily expressions of inducement and submission do not counteract or conflict with one another. The prevailing bodily expressions of captivation (internal genital excitement) coexist with the prevailing expression of passion, which is external genital excitement. The two, in fact, tend to enhance each other.

> Some girls, during the emotion of captivation, experience extreme flow of saliva, bodily heat, and a sort of prickling excitement of the entire body, with marked muscular tension and a certain feeling of strain, due, apparently, to marked tension of tonic muscles and increase of blood to the brain. The increase of both strength and rapidity of heart beat, and rise in systolic blood pressure, is very marked during captivation. These symptoms show a notable contrast to the dry mouth and feelings of weakness and even nausea frequently expressive of passion.

Abnormal or Unpleasant Emotions

By far the commonest of the unpleasant emotions are fear and rage. Each calls for extensive discussion.

Fear. This emotion accompanies flight or involuntary withdrawal from some threatened danger or suffering. Fear and rage are both composed of the elements of dominance and compliance in the wrong relationship to each other. In desire, for example, compliance with hunger pangs, or with the food which will quell them, is only temporary and is the means to a dominant end. Similarly in satisfaction; though there is far more compliance here than in desire, compliance is still held in check and ultimately replaced by dominance. Dominance over our environment means that we control it. Compliance means just the reverse. Here the environment has the upper hand. And in so far as we ultimately comply with an inanimate object stronger than ourselves, we suffer defeat, which in turn is accompanied by some degree of self-destruction or injury.

Deliberately to seek compliance with our environment as the ultimate end of action is deliberately to act in such

a way as to diminish our own power and defeat ourselves. Therefore, while compliance is a necessary part of the compound emotions of desire and satisfaction, it is the subsidiary part of both emotions in so far as our purpose of action goes. In any individual emotion combining dominance and compliance, the latter serves the former. Now, when compliance gets the upper hand, we get emotional reversal. This is an unnatural or abnormal relationship between the two elementary emotions. We dominate for the purpose of ultimately complying. A bare statement of this reversal of emotion elements seems ridiculous. Yet, this is precisely the situation in fear and rage.

In fear, we feel compelled to comply with an overwhelmingly strong opponent. We feel unable to resist it. And our ultimate purpose is to give in to this threatening object for the purpose of escaping injury or pain. In order to escape from or comply with the dangerous object, we must, of course, dominate it sufficiently to comply with it.

Take, for example, the woman who sees a mouse. She shrieks, lifts her skirts, and jumps on a chair. All these acts express dominance. Yet, at the same time, these dominant acts have the ultimate purpose of enabling the woman to escape from the mouse, with which she feels compelled to comply. She does not feel able to battle the mouse or to try to dominate it ultimately. She merely wishes to dominate it just enough to make good her escape and her compliance with its threat.

Here we see the reversal of emotion elements, which gives rise to fear. Ultimate defeat is accepted at the beginning of the action. At the same time, the person is

urged to act desperately in order to carry out his compliance with the danger. He experiences dominance and compliance in conflict, the compliance to which he is compelled gradually defeating the dominance which has assumed a subsidiary position in the emotional compound.

This gradual defeat is extremely unpleasant. Fear is the most unpleasant of all emotional sufferings. It is far worse than the pain which is threatened. It renders the person suffering it less efficient, less vigorous, and less self-controlled.

Here is a case which neatly illustrates the bodily weakness resulting from intense fear. A robust Alpine climber was sitting on what he supposed was the edge of a cliff, when he suddenly saw the ice swept away by an avalanche a few feet from where he sat. He found that he was dangling his legs from a thin shelf of sheer ice which might give way at any moment. He experienced a devastating fear. He could not move for several minutes. He seemed paralyzed. Ultimately, he managed to roll over on his stomach and to creep back, inch by inch, still half paralyzed, according to his own description. The moment he reached solid earth, he fainted and was unconscious for about ten minutes. When he recovered, he could neither stand nor walk, and it was several hours before he could proceed.

The use of fear in moving pictures is two-fold. In the first place, it may be used as a foil to successful dominance or subsequent satisfaction. It may also show character development. One of the most appealing themes in the early days of the motion picture was the story in which the hero overcame his cowardice, ultimately developing

greater courage and bravery than his enemies had shown. The hero first feels keenly the danger with which he is threatened, and is at an absolutely low ebb of fate. He then drives the fear from his mind and proceeds to conquer the obstacle causing his emotion. A moral victory of this kind meets with great approval, especially if the accompanying action is vivid and vigorous.

Rage. This is a conflict emotion which, like fear, consists of a wrong relationship between compliance and dominance with respect to the purpose of action. Literary commentators and fiction writers have frequently pointed out the fact that there is a great similarity between the emotions of fear and rage. William James emphasized the fact that fear frequently turned into rage when all hope of escape was finally cut off. The cornered rat will fight and manifest all the symptoms of extreme rage. The sneak-thief, caught in robbery, frequently flies into a futile spasm of rage, during which he may shoot the person interfering with his activities.

There is here much more dominance, in proportion to compliance, than in the case of fear. But dominance is still controlled by forced compliance with an object which has threatened the experiencing person. When an individual discovers that escape from a threatening object is impossible, the total situation compels him to dominate the enemy by aggressive attack. The dominance thus aroused is vastly greater than before. In fact, the entire primitive dominance emotion is called into play, still controlled by the realization that defeat has already been inflicted by the opponent. This awareness of irretrievable defeat gives a bitterly thwarted and hopeless self-aban-

donment to the prevailing dominance emotion, which constitutes the peculiar emotional quality of rage. Rage is dominance expending itself with conscious futility, turned partially upon itself in a fury of impotent overaggressiveness. It is a conflict between tremendous dominance and a controlling compulsory compliance which, though bitterly resented by the person motivated, is accepted as the inevitable end.

Rage reduces the efficiency of action chiefly by injecting an element of wildness and self-abandonment. Many a prize fighter has been defeated in the ring by a nimble-witted opponent who has deliberately excited him to self-abandoning rage. The insult is passed while the fighters are in a clinch. The insulted boxer "loses his temper" and "flies into a rage," and the spectators observe that he no longer keeps on his guard or makes any attempt to sidestep his opponent's plays. He rushes in blindly, "with blood in his eye." His clever opponent welcomes this abandonment of boxing skill, increases his own defensive caution, at the same time taking instant advantage of every weakness uncovered by the wrathful boxer, plants a well-planned uppercut with all his reserve force, and the fight is over.

Habitually timid or cautious persons frequently come to believe that rage is a useful emotion. This is because they cannot arouse themselves to sufficient dominance, except when they are cornered, when their dominance takes the form of rage. Frequently, the usually sweet and mild-mannered person surprises his friends by his sudden wrath, making them give way to him before they can recover from their astonishment. Or, possibly, the dominance in such attacks of rage is sufficient to over-

come an obstacle which would have been otherwise insuperable. In either case, the dominance accomplishes its purpose despite the handicap of wildness or self-abandonment. The habitually mild-mannered person fails to realize, however, that he overcomes obstacles, not because he flies into a rage, but rather because he arouses an adequate amount of dominance for battle. He wins his battles in spite of the element of thwartedness or compliance which controls his dominance, and not because of it.

Righteous indignation represents a situation of more or less the same general nature. The long-suffering and virtuous individual at last is driven into a corner. He is attacked by his enemies and unjustly injured again and again, without appearing to resent it. At last, he can stand it no longer. He makes up his mind that the attacks upon him are malicious. He feels that the time has come when he must overcome his persecutors. He becomes wrathful, and conquers them. An audience, watching a situation of this sort on the screen, feels that the rage is justified. The very element of self-abandonment, which is unfortunate from the point of view of the person who thus exposes himself to injury, adds emotional interest and excitement to the scene, for the spectators.

Although rage is an unnatural and abnormal emotion, it may be effectively used in the building of stories. Writers should clearly understand that the really admirable and normal element in the emotion is dominance. If the thwartedness or controlling compliance element is unduly emphasized, the rage will begin to seem silly and unpleasant to the audience. They will begin to think that the character is "making a fool of himself," as indeed

he is. Rage, therefore, may be used in story writing as a legitimate portion of the emotional behavior of the characters, but it must be limited to certain justifying circumstances, and the dominance element must be emphasized, while the compliance is carefully minimized and controlled. Rage, on the whole, is not nearly so unpleasant an emotion, either to the person experiencing it or to the observers, as is fear, chiefly because there is less conflict and reversal of elements in this emotion.

Jealousy and Hatred. Like fear and rage, these emotions represent unnatural states of conflict between their constituent elements. Jealousy arises in any situation in which we experience a conflict between desire for an object or person and submission to a person who stands between ourselves and possession of the desired object. It may occur either in business situations or in appetitive rivalry, or in circumstances connected with alleged love affairs. We use the word *alleged* advisedly, because there can be no such thing as jealousy in true love. Love is the giving and not the taking. It is only when desire creeps into love that jealousy becomes possible. If we desire to possess the loved one for our own pleasure more than we wish to submit to the beloved's happiness, then we have a situation in which jealousy arises.

If we desire to possess a person, a thousand dollars, a house, or anything else whatsoever, and another person proves himself superior to ourselves in obtaining the desired object, we are confronted by two emotional possibilities, if we are normal. We must either submit to the person who has proved superior to ourselves, or we must feel desire for the object which we have lost. Jealousy

arises when desire is the ultimate purpose of action, for there is a conflict between desire for the object and submission to the superior person who has obtained possession of the desired object. If submission is the ultimate purpose of action, the individual experiences the emotion customarily termed "good sportsmanship." He feels a generous admiration for the successful rival. The desire which has been realized by the other person only enhances his admiration for that rival's demonstrated superiority. But, if his regard for his rival is solely superficial and trifling, in comparison with his continued desire for the unattained object, a conflict between desire and submission is inevitable under the controlling whip of the appetitive emotional elements.

Since jealousy is unfortunately a very common emotion in everyday experience and is felt frequently by a great majority of people, its use in stories and plays has been somewhat overdone. Certain schools of fiction portray jealousy as a proof of true love. This mistaken theory maintains that a lover can always tell when a woman begins to fall in love with him by observing when she begins to be jealous of other women. There is just enough truth in the theory to keep it alive long after psychology should have disposed of it. It is unfortunately true that, in proportion as a person becomes erotically attractive and pleasing to us, we too often begin to feel a desire to possess him for the sake of enjoying the newfound pleasure in his society. Thus, desire is frequently evoked as a secondary result of "falling in love." Under these emotional conditions, which are neither natural nor admirable, it is quite true that jealousy manifests itself soon after desire takes control of the situation. But the

truly normal condition of the love emotions is shown in stories in which a woman's love remains free from desire and jealousy, expressing itself in life-long loyalty and in self-surrender to the loved person, even though he prove unfaithful, undependable, and generally worthless.

This deep, powerful, true love is always more appealing to motion picture audiences than a love which contaminates itself with selfish desire and jealousy. Jealousy may be used effectively in comedy situations, as a symptom of love, or to produce a threat of compromising situations. But a comedy of this sort depends for its effect upon a slight burlesque or dominant twist of the emotions portrayed. It is a safe rule to regard jealousy as an unqualifiedly abnormal emotion, to be reserved, in writing for the screen, for unsympathetic characters and comedy situations.

Hatred, like jealousy, arises from a situation in which dominance controls the love emotion toward other people. We may recall the literary axiom that "hatred is akin to love." Many writers have correctly described the turning of love to hate when the loved person has proved treacherous or unworthy of affection. In a situation of this sort, the once-loved person arouses two separate states of emotion in the mind of the injured individual.

Here is an actual case. Helen and Alice were intimate friends. They confided in each other, and each believed the other was submitting to her with the utmost loyalty and friendship. Enter Gladys. She first showered her attentions and affections upon Alice. Alice adored Gladys and confided all her feelings to her friend Helen. Soon, however, Helen began to win the attention of Gladys. This went on for some time, until, at last, Alice began to

believe that Helen had betrayed her confidence. She accused Helen of treachery and bad faith. She convinced herself that, during the time that Helen had appeared to be her best friend, she had, in fact, been dominating her, Alice, for her own selfish purposes. The final act of dominance on Helen's part was, of course, her "stealing" Gladys' affections from Alice. Whereupon, Alice conceived a violent and extreme hatred for Helen, the girl whom she had formerly regarded as her most intimate and submissive friend. Alice had a conflict between the emotions of inducement or captivation, by which she had believed she was holding Helen's friendship, and the emotion of dominance suddenly evoked by what seemed to Alice a deliberate injury inflicted by her friend Helen. Dominance controlled captivation, and the result was hatred. Had Alice continued to feel captivation or love for Helen, as the ultimate purpose of her conduct, she would not have felt hatred, but rather maternal interest in Helen and a sincere wish to reform her by making her give up her supposed treachery or disloyal conduct for her own sake.

When dominance and captivation are felt simultaneously with captivation in control, this active type of emotion always results. It is both pleasant and constructive for the person who feels it. When dominance is allowed to control, the most destructive of all emotions —hatred—results, due to the conflict with captivation; and dominance defeats and destroys captivation, just as the person who entertains hatred for another strives desperately to destroy the person hated. The person who permits himself to feel continued hatred destroys his own peace of mind and emotional balance much more effec-

tively than he destroys the happiness or well-being of the person whom he hates. Hatred is a two-edged emotional sword, cutting both the hater and the hated. It is responsible for the most cruel and destructive of wars. It disrupts families, communities, and nations. Civil war is notoriously more bitter than war between foreign nations because of the greater friendship or mutual submission which existed between the two parts of the same country before the beginning of war. The greater the love, affection, or friendship preceding the hate, the more violent and destructive will be the subsequent hatred, because of the more violent conflict between captivation, or love, and the destructive dominance in control.

Hatred has two possible uses in screen stories. It may be used as a contrast emotion, depicted as the driving force behind the action of the villain, or in any other contrast to the pleasant, constructive emotions of love and friendship. Secondly, it is frequently effective to show character development wherein initial hatred is overcome by love and generosity. The hero may bitterly hate the slayer of his father, for example, or the supposed betrayer of his sweetheart. Yet, when the man whom he hates is finally brought within his power, his native generosity which, psychologically speaking, springs from his love emotions, proves greater than his hatred, and he saves the life of his enemy.

Such a moral victory of love over hate, or love over dominance, always holds a sure-fire appeal to the screen audience. Human beings are essentially moral and creative, and audiences involuntarily rejoice in the overcoming of any base emotion by love. This inspires a deep-seated respect for the high character development of the

hero. This story device might be applied to any combination of destructive conflict emotions overcome by normal emotions, and especially by love or one of its constituent elements.

CHAPTER VIII

SOUND EFFECTS

THE addition of sound to the motion picture both helps and complicates the story writer's problem. For sound is almost as plastic and adaptable as language, and no one has yet sufficiently mastered its art to recognize its infinite possibilities.

Do not think for a moment that a sound picture is nothing but a mechanical combination of a silent movie and a stage play. One day on any studio lot is enough to expose this error. The talkie is a new art. It is as distinct from the silent picture as the silent picture is distinct from a stage play. It is capable of producing effects unknown to all other arts, and its technique, still largely unknown, is vastly more complex than any other. Were Leonardo da Vinci alive to-day, he would waste none of his precious genius on the arts of painting and sculpture. He would not be content with the clumsy mechanics of the theater. But we may be reasonably sure that he would find inexhaustible delight in sound pictures, because the mastery of their technique requires a unique combination of art and engineering.

People who do not understand the essential newness of the talkies are saying that any clever dialogue writer on Broadway can go to Hollywood and achieve fame by making sound pictures. Well, they have not done it. And there is every reason to doubt that they ever will.

The best they can do is to help the producer who is grasping the aim and scope of sound.

To understand the fundamental difference between silent pictures and the talkies, you must first have a clear grasp of an important psychological law. Here it is.

The less our senses receive, the more our personalities must contribute to the understanding and appreciation of the object presented.

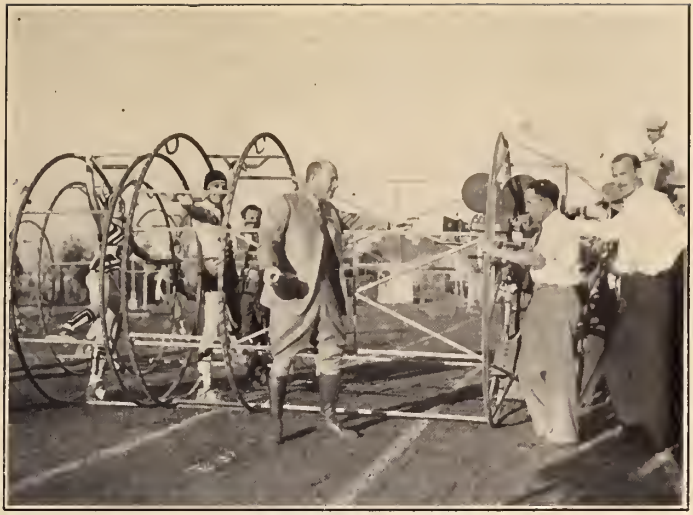
This will probably sound either hopelessly commonplace or altogether too deep, according to your own familiarity with the workings of the human mind. At the risk of offending the intelligence of some readers, we must go into explanations here. Let us suppose that you are out walking in a mountain country where you can look across wide valleys. You see some little black dots moving on a slope ten miles away. That is all that your unaided eyes can see. What are those dots? Are they deer, or antelopes, or bears, or people, or birds, or drifting leaves, or what? Your mind becomes alert, you study the situation, you guess, you analyze, you do all sorts of things intellectual and, let us say, you come to the conclusion that the moving dots are antelopes. Now, nine-tenths of this decision comes from your total personality, by which we mean your whole range of personal and private memories, all of your habits, all of your familiarities with objects of all sorts, and, to a certain extent, all of your dream life and fantasy. The less your eye registers, the more this personality of yours determines what meaning shall be given to the moving dots.

This is one of the chief reasons why dreams are such private and personal affairs. While you sleep, your senses are at low ebb. They register poorly. But still they do

register a little. And this little which serves you as data is construed almost wholly in terms of your own unique nature.

Now reverse the situation. Suppose that you are a zoologist making a biological survey of an unknown territory. You have telescopes, a large staff of helpers, and plenty of time to investigate the little dots you see on the distant field. Furthermore, you are moved by a strong desire to make your report of the local fauna as complete and as accurate as possible. Instead, then, of guessing what the dots are, you command your party to march over to them, making observations as you go. Finally, you get close enough so that you see them, hear them, smell them, and perhaps touch them. Every member of your party does likewise. You exchange information and impressions with one another. And now what happens? Your conclusion as to what these things are is determined almost entirely by the totality of sense impressions of all the members of your party, taken in combination. So long as you were all ten miles away from the moving dots, one of you might have insisted in all sincerity that they were antelopes, while another declared that they were brown bears. But, as you increased the number and variety of your immediate impressions, such personal differences of opinion are inevitably overwhelmed. Now the objective fact stands forth.

What has this to do with the motion pictures? Well, for one thing, it means that when you look at a mere play of light upon a screen in a darkened hall, you are far closer to dream life than when you are hearing the characters on a movie screen talk their parts. Every word they utter determines the nature of the situation,



TAKING TALKING PICTURES UPSIDE DOWN

Cecil B De Mille, in the foreground, is directing this scene from *Dynamite*. As the girls turn head over heels in the aero wheels, the camera and "mike" turn with them. (Courtesy of Metro-Goldwyn-Mayer.)



GALLOPING TALKIES

An unusual picture of a moving sound scene, with Norma Shearer and Lewis Stone in *Their Own Desires*. The microphone is hanging from the portable camera outfit. (Courtesy of Metro-Goldwyn-Mayer.)

gives it a kind of objective reality, and removes it from the realm of private speculation. The human figure which flits noiselessly through the scenes of an old-style movie is a bit of a ghost. Let him open his mouth, and he becomes flesh and blood.

The effect of this transformation is incredible. You must actually experience it in order to feel its depth. As William De Mille has put it:

> It is interesting, and frequently appalling, to realize how much screen personality may be changed by the addition of voice; the actor's very appearance seems different. In very few cases does the voice of a screen idol satisfy fans who, for years, have been imagining it. On the other hand, those players who have beauty of voice find a new world opened to them. No longer is it necessary to make personality 100 per cent visual. Actors who for years have been almost unnoticed may arrest attention vocally and convey to the public a charm of personality which they have been unable to do through the eye alone. It is Judgment Day, and many will be raised up while others are cast down.

The sound pictures are the first art which can even begin to approximate reality. And it is their almost uncannily realistic effect which makes the understanding of sound effects of vital importance to every story writer. If you wish to study a picture which, from this point of view, is one of the most intelligently directed of recent talkies, go to see *Alibi.* This excellent melodrama makes the most of every possible scene in which sound is effective. In the very first reel, for example, see how the sound of prisoners marching in lockstep sets the tone for the whole story. Note how the element of suspense, following the murder of Patrolman O'Brien, is intensified by the sound of policemen's clubs striking against resounding steel and stone as, one after another, the patrol-

men call for help by this speedy system of codes. Or again, watch the excited interest of the audience rise to nervous pitch as the noise of a whirring taxi rushes to their ears.

Now look carefully at another type of sound effect successfully used in portraying a psychic event in the experience of one of the screen characters. Here, trick effects in sight and sound are deftly intermingled in the marvelous scene of the third degree, when a stool pigeon is being cross-examined by the police captain. Note how the speeding up of the nagging voices, combined with the dizzy picture of countless insistent inquisitors, conveys a total impression of the psychic bewilderment and exhaustion that led the stool pigeon to succumb to the interminable questioning of the captain.

Again, here is a very simple illustration of the subtle differences which develop in the use of a device as simple as whispering, first, in the short story, second, in the play, and third, in the talkie. We read in a short story that Ethelbert, the evil-minded waiter in the roadhouse, slinks up to Bettina, the hard-working cloakroom girl, and whispers into her little ear, "I love you. You must marry me, or I shall put some shellac in your cocktails." Here we get no special dramatic effect from the whispering. The threat of Ethelbert is conveyed almost entirely by the mere meaning of his words. To be sure, the author tells us that he whispers them, but this does not convey to most readers a feeling significantly different from the one which they would have if the author had said, "Ethelbert bellowed into her ear." Most of us would probably be led to think more or less hazily that Ethelbert was whispering for no other purpose than to prevent

other people from hearing him. So far so good. But there is much that a whisper can tell beside that. And it does not emerge from the printed page.

Now we are in a theater. Now we are watching the great play, *The Shellac King,* which is the dramatic version of this same wonderful story. The curtain rises, and we see the svelte and haughty Ethelbert slinking up through a maze of coat hooks to the rear of Bettina and inserting a stage whisper into her ear. What effect is now produced? You know, of course, that a stage whisper is no whisper at all. It is something else again. It is a very peculiar and special noise. The genuine whisper cannot be used on the stage, if the whispered words are to be understood by the audience. The world's greatest whisperer could not be heard beyond the second row of seats. A first-class stage whisper is a noise a little bit like a bad cold in the throat. Technically speaking, it is a symbolic noise. It stands for whispering, although it really isn't, and we come to accept it as such just as we come to accept the printed word on the page as meaning whispering. Now, to be sure, the stage whisper is vastly more successful than the printed word in arousing in us feelings such as those which a genuine whisper conveys. But it falls far short of the realistic effect of a whisper as reproduced in a good sound picture. You can hear a real whisper in talking pictures as far away as the last row of the balcony, and it is a whisper to everybody in the audience.

Study the effects of sound in slapstick and farce comedy. Listen to the noises of the gas range, the crash of dishes breaking on tile, the shrill scold of the nagging harpy, the downward trend of the hero as he falls three

flights, hitting every third stair on the way, the Gargantuan gasps of husbands surprised by their wives. Then turn to serious character drama and let your ear take in the crunch of hard winter snow, the whine of a blizzard, the futile spinning of the wheels of a motor bus sunk deep in mountains of snow, the breaking up of kindling wood for the church stove, the shattering of ice as a girl breaks through it and nearly drowns, the crunching of a huge tractor over snow, and many other novel and singularly faithful sound reproductions.

The scale of emotional values is also affected by the negative phase of sound. The most casual observer of talking pictures must have been increasingly impressed by the new quality of silence. Its use by contrast can achieve almost any desired effect, from the most terrific suspense to a poignant pathos. But silence, like sound, must be built into your story. It must not be used as a convenient relic of the old days of the silent screen.

One of the deftest tricks of combining silence with sound, and in making the combination meaningful, is to be seen in *Wonder of Women,* which, by the way, is a lovely rendition of a Sudermann story, achieving dramatic and pictorial effects far beyond the possibilities of the original drama. The director has ingeniously used silent sequences to present events which happen *before the main action starts*. The latter he keeps entirely in sound. Few spectators seem to know what has been done; but many of them feel something very significant.

What is the significance, though? Simply this: The main action is given *as the living present,* in which we perceive events about us with all of our senses. But the prior events are given as memories. Not that they are so

labeled on the screen; that would be clumsy indeed. Rather do they appear as visions, dreamlike, still. Just as the past lives itself over again for most of us—in fleeting scenes before "the mind's eye." Thus, a higher order of realism is preserved and presented. The device has a touch of genius.

We may lay down one rule firmly. A character who has been presented with speech should not appear in silent footage thereafter, except in situations in which the character plays a momentarily minor part. If other considerations compel you to switch from sound to silence, then avoid doing so within the same sequence.

Once the spectator has heard the voice of a character, he fuses the sound impression with the eye impression. The voice becomes to him an integral part of the personality on the screen. Thenceforth he expects the voice with the form and action of that personality. Omit the voice and you produce in your audience an unpleasant surprise akin to the jolt which might be caused by the reappearance of the character with an arm or a leg missing.

This thwarting of natural expectations weakens and becomes thereby less serious if the character, after having been presented first of all in an important talking rôle, later appears, let us say, merely as a member of a large crowd. And, to some extent, the same result occurs when several sequences intervene between the last shot of the character in talking film and the first shot in silent.

An excellent specimen to study in this connection is the sound version of *Saturday's Children,* in which Corinne Griffith starred. Here we find both varieties of shifting. She first appears in the old-fashioned silent pantomime,

and then takes a speaking part. Later, she switches back again from speaking to silence. Study this picture with care and you will almost certainly observe that the first shift from Corinne silent to Corinne talkie is not genuinely offensive. But the shift back from talkie to silence is thoroughly obnoxious.

Notice particularly the silent sequence, in which we see Corinne's sister drop in for an evening visit with hubby and the baby just when the newlyweds want to be left alone. The absence of speech here is enough to infuriate a rabbit. Having previously heard the hoarse, hard voice of the cynical and cunning sister, we are bewildered at the miracle by which she has been suddenly stricken dumb. For this we may thank God but not the director.

The problem of placing music against dialogue is a delicate one. In the early months of the talkies, every producer was strongly tempted to use a great deal of singing. Songs were known to be popular, but that was not the only reason for introducing them. They came in handy by way of economizing on dialogue, which is very difficult to write. Up to the summer of 1929, there was a marked preponderance of stories some of whose leading characters were singers and had to sing at length in the development of the action. An excellent illustration of this is *Weary River,* in which Richard Barthelmess played the rôle of an underworld youth who composed lovely music. The more discerning motion picture critics objected to a repetition of the song *Weary River* throughout the presentation.

If you want to see how the theme song should be handled, see *The Pagan.* Here, it is treated far more

subtly than in *Weary River*. Above all, the Pagan's singing is spontaneous, carefree, and done without concert instruments, in the main. We do not get the impression that a stage has been set. Secondly, the singing itself does not interrupt the main line of dramatic action, but is a piece of it. In *Weary River,* the musical convict composes his song and plays it with the prison band at a regularly staged and scheduled performance. It is carried by radio all over the country and wins for him many unknown friends. Now, this is a perfectly legitimate device, but the staging of the song is none the less slightly separated from the other action of the story. Each time we hear it, we get the feeling that the story must stop and we, the spectators, must pause to listen to this selection. It is, so to speak, the next number on the program. In *The Pagan,* on the contrary, the love song is just as much an integral part of the simple and straightforward action as is the girl's smile or the trickeries of her harsh fosterfather.

That excellent picture, *In Old Arizona,* also furnishes a good example of the right use of musical numbers in stories for the talkies. The bandit lover, who came in the conventional Spanish or Mexican riding costume to see his lady, played properly enough upon his guitar while calling on her. His rival, the sergeant of marines, sang lustily with the other boys in the village café. Musical elements of this sort, combined with little homelike noises of everyday life, give a total effect of realism which is greatly sought after by directors and studio executives of large-production companies.

At the present stage of development, alto and baritone voices carry better than soprano and tenor. This is true

both of the singing and the talking voices, but it is more marked in speech than in song. It is not due to any imperfection in the recording or transmitting instruments; rather is it a peculiarity of acoustics. We usually imagine that high voices, even screeches, are more penetrating than deep voices; but this is not correct. You can make yourself heard more clearly and at a greater distance if you talk at low pitch.

For the writer of sound picture stories, this means that he will gain something by making his major characters all people blessed with low-pitched voices and by giving the important singing parts to altos and baritones, or basses. This is a minor trick of technique that is peculiar to this new art.

Many technical difficulties with sound are temporary and may disappear before this book has been read by you. The mechanics of reproduction are still far from perfect. They give rise to sundry nuisances that bring tears to the director's eyes and drive the poor author insane. Consider, as one of many, the psychic effects of amplification.

It is impossible to make the human voice come out as softly as a living actor speaks in his tenderest passages. What is *pianissimo* in a conversation between lovers tends to rise to a *forte* as it comes out of the machine. So it happens, only too often, that, when your hero sighs, "Darling, I love you, I love you," the audience hears all the bulls of Bashan bellowing—and straightway giggles. The emotional effect is lost.

As matters stand to-day, the best you can do is to pick your dialogue with great care, shunning tender phrases which have to be toned down. Silence is infinitely better

than a thundering whisper. And silence, fortunately, comes out well.

A less serious plague arises at the *fortissimo* end of the scale. Very loud sounds sometimes undergo a subtle change of quality that spoils the scene. But, luckily, these seldom are indispensable. Another vexation is the metamorphosis of many simple natural sounds. A splash in the water is likely to come out like a rattle of old bottles on a tin roof. The clatter of horses' hoofs on a dirt road may sound like a hammer thumping a plank. Nobody has yet conquered these mysteries. So the author should beware of making incidental sounds indispensable to his main story.

Another defect of many talking pictures goes back to the technique of the silent screen. The latter had to rely almost entirely upon skillful pantomime to convey various shades of emotions and attitudes. Hence, motion picture actors of the old school developed pantomime to a degree incomparably higher and greater than that of the stage. Nearly all of the good directors in Hollywood have built their reputations, in part, upon their mastery of pantomime. Their natural tendency is to use it to the utmost.

Now, along come sound pictures, in which dialogue and other forms of human expression can be added to the pantomime. What is the usual result? The director instructs the players to carry out their pantomime as usual, and then has them talk, as well. Now, psychologically, this is unsound nine times out of ten. True, some people do pantomime while they talk, cry, laugh, and shout. But most people tend to pantomime very much less than actors had to in the silent pictures. They

use their tongues instead of their arms and legs and faces. The result is that when we combine intensive pantomime with intensely dramatic language, the effect is badly exaggerated.

We know of no better illustration of this than the acting of Norma Shearer in *The Trial of Mary Dugan.* Norma Shearer is a brilliant motion picture actress whose work is greatly admired. She has also proved to be an excellent speaking actress. In the directing of this picture, however, she combined the utmost of pantomime and posture with intensely dramatic speech. The result is that her playing is overdone, at least for many people. It would have been infinitely more effective had she subdued both types of action.

Probably several years must elapse before Hollywood's directors learn this lesson in full. It is very difficult indeed to drop one's old habits, especially habits which have proved eminently successful in another situation.

Perhaps the most startling novelty in sound picture technique is the double movement of camera and speech recorder. In the old silent picture, the director was absolutely bound to the camera. He had to hold a shot up to its end, and then title it. Hence, the entire movement of the picture was restricted to whatever the photographer could record. Now, all this has been changed, and so subtly that some directors are even yet unaware of it.

Two independent movements are now possible. The camera may move about while the sound recorder picks up only a fixed dialogue or other sound effect from a single source. Or, conversely, the camera may hold fast on one spot while the sound recorder shifts from one sound source to another. An instance of the first method

would be a shot in a scene in which we see two men standing on the deck of a boat and hear them talking about the scenes around them. The camera swings from object to object as it is described in the conversation; but the sound recorder holds fast to the conversation itself. An instance of the second method, applied to the identical situation, would appear with the camera held on a big mountainside, while the remarks of a dozen different people, all unseen of course, were picked up by the sound recorder.

Over and above these two compound patterns, you may also use pictures alone and sound alone. Personally, we feel that the latter technique has been totally overlooked thus far. Why shouldn't there be openings in a dark screen, from which talk or other sounds come? And why not similar passages between talking pictures? The public is thoroughly accustomed to this sort of effect in radio broadcasting. And the dramatic effects might be powerful. The nearest approach to this technique is in *Dynamite,* where you see everything go black while you hear the crashing of a great explosion. The effect is tremendous.

From the author's point of view, however, the limitations of sound are negligible. And they grow more so every day, as directors and technicians master the art of its use. The writer need only remember that his story can be so improved and perfected by the addition of sound to picture as to exceed immeasurably his fondest hopes.

Every dramatic effect which you achieve in words will be vastly more powerful when portrayed with sound—and for better or for worse. Thousands of critical eyes

the world over will watch your characters in the situations you portray and will read into them the experiences of their own lives. Give him a situation which is essentially real, dramatic, and plausible, and the most wary spectator will turn eager participant. Let him see unreal people in unreal life, and he will be the most intolerant of scoffers.

The intelligent use of sound in realistic pictures adds one more phase of vital human experience to a new form of art. And you authors are co-artists in the virgin field of the sound pictures. Study it well, for by your clear grasp of its infinite possibilities you stand or fall.

CHAPTER IX

TITLES

THE choice of suitable titles for your stories depends on many factors. Most important of these is the fact that here you have your first point of contact with millions of people attending the movies all over the United States and in many foreign countries throughout the world. These millions are made up of young people and old, people of wide education and people of none, rich men and paupers, travelers and stay-at-homes, happy and unhappy, housewives and business women, people of strict moral scruples and people of none. All of these and many, many more.

How, then, to select a title which will appeal to this heterogeneous mass? We cannot pretend to give a comprehensive answer. The problem is too complex. The best we can do is to make some suggestions and to give some illustrations to help you choose your title.

Of course, titles are frequently changed to suit the publicity and sales departments. Sometimes the change is made after the picture is all ready to be released. The title of a story during production is known as the "working title," in open acknowledgment of the fact that the final choice has to do almost entirely with sales values and publicity values rather than with the story itself.

In some instances, certain words in the title determine the success or failure of a picture from the box-office

point of view. Mr. Frank Whitebeck of the Fox West Coast Theaters explained this aspect in a speech given at the annual motion picture luncheon of the Los Angeles District, California Federation of Women's Clubs, May 18, 1929:

> There are many little matters of psychology in our advertising game. Do you know the word *mother* cannot be used in motion pictures if we are to expect success of that motion picture? Another word that we cannot use in advertising is *marriage*. Think of a picture that was a success with *marriage* in it. Another one is *liquor;* and you can thank goodness for that. *Mother Knows Best* (I am going to quote that for instance) was a failure, and we changed the title and called it *Sally of My Dreams,* and it was a success. *Red Wine* was a failure. We changed the title and called it *Let's Make Whoopee,* and it was a success. There is your problem as well as our problem.

While the original writer, therefore, may expect to have very little to say about the final choice of title for the picture, he may materially improve his chances of selling the story by selecting a striking box-office title. Occasionally, a story is bought for the title alone, and a new story is subsequently written to fit it. At one studio, a story was purchased for the sake of its title, and no fewer than ten stories were subsequently written by staff writers and free lance writers under special contract to attempt to utilize the title which had thus been purchased. At last, a story was found which was acceptable. The original writer received $1,500 for the use of the title alone, the entire story being thrown away immediately upon purchase.

Another instance occurred when a picture was ready for release. The title was pronounced unsatisfactory by the publicity and sales department. An original story

was meanwhile submitted with an attractive box-office title. This story was purchased solely for the title, and the title was immediately transferred to the picture which was ready for release. The rest of the story was thrown away.

Wonderful pictures have frequently been spoiled, so far as box-office value is concerned, by titles which did not appeal to the public. If a title carries some unpleasant suggestion, it may frequently ruin the sales value of the picture.

It is very difficult to give any concise or practical formula for the selection of a suitable box-office title. It is comparatively easy, on the other hand, to tell what elements should be avoided. Titles containing any vulgar, profane, or disagreeable words or meanings will never do. The maximum length is four or five words, and preferably two or three words. Let there be some striking idea concisely expressed. Any suggestion of mystery, thrills, or danger usually has a potent appeal. Any title suggesting captivity or subjection of one person by another has a disguised erotic appeal, which is one of the strongest possible box-office attractions. The words themselves must have a snappy, attractive sound, since the title will be spoken by the public at large in telling about the picture fully as often as it will be seen on the printed page.

The following are examples of good box-office titles:

The Singing Fool
Flaming Youth
Flesh and the Devil
The Pagan
Our Modern Maidens
Broadway
The Iron Mask
Desert Nights

The Penalty	*The Divine Lady*
The Wild Party	*Foolish Wives*
The Wolf of Wall Street	*The Flying Fleet*
Alibi	*The Lost World*
His Captive Woman	*Girls Who Dare*
Slaves of Beauty	*The House of Horror*
The Silver Slave	*Charming Sinners*

Titles whose appeal depends upon the popularity of a character, play, or work of fiction may be exemplified by *Jeanne d'Arc, The Hunchback of Notre Dame, The Phantom of the Opera, Les Miserables, Robin Hood, Show Boat, Madame Sans Gêne, Monsieur Beaucaire, Maytime, The Three Musketeers,* and *The Four Horsemen of the Apocalypse.*

A highly figurative title is dangerous. You cannot be sure that many people will understand it, especially before they see the picture. A fine story was recently released by Pathé under the title of *High Voltage.* The obvious suggestion here was that the story had to do with an electrical power plant and perhaps engineers and linemen connected with it. But it did not. The title was purely poetical. Did it refer to the dynamic power of the two leading characters, or to the high tension of the entire party which was stranded during a blizzard in a deserted church in the mountains of Nevada? See the picture and judge for yourself. The authors cannot answer the question.

PART II

THE ART AND ITS MECHANICS

INTRODUCTION TO PART II

THUS far you have been considering the fundamentals of the art and its many techniques. Probably nine out of ten workers in the field of sound pictures find these problems more than enough to absorb their energies. Certainly, few story writers, continuity writers, scenario editors, and directors delve deeply into the other grand division of the picture business, wherein engineers and scientists toil over physical and chemical puzzles. They leave all these to specialists.

Nevertheless, one cannot know too much about anything; and the motion picture business suffers woefully from a surplus of people having a deficit of knowledge. Furthermore, the most competent workers always are eager to assimilate all they can. So we shall outline in this part of the book the three main parts of picture mechanics, namely, the underlying scientific facts of reproducing scenes, sound, and color.

Should your interest be limited to the inventing of stories, or to preparing stories for the director, or to directing them, you will probably not care to read the following chapters. But, sooner or later, you are likely to find that some of this highly specialized information is sorely needed.

CHAPTER X

SOUND TECHNIQUE

MAKING silent pictures was difficult enough. But now that sound must be added to every picture, we have a wholly new technique. Let us consider briefly the processes involved in picture making.

The motion picture camera is designed to take a long series of individual photographs in rapid succession. It operates on the same principle as a machine gun, but instead of shooting out bullets, it is shooting in a series of pictures. The ordinary word for taking a picture is "shooting." Individual pictures or short sequences of pictures are called "shots." Thus, we say: "Is Harry Pollard shooting to-day?" Or, "Jim Cruze got some nice shots on that undersea set yesterday." We mean that Harry Pollard is actually photographing some part of a story, and that Cruze took some successful motion picture photographs of the set.

In picture language, all shots are moving picture shots unless otherwise designated. There is a special photographer usually on the set known as the "still man." He uses an ordinary camera which takes only one picture at a time. These are called "stills," for they do not, of course, show motion. We may as well use professional terms in our study of sound technique. So keep in mind these and other motion picture terms as you proceed.

The principle of motion pictures is a very old one. It

depends on the simple fact that a series of pictures shown in quick succession makes the person or object photographed look as though he were moving. Do you remember the old nickel-in-the-slot machines? You put in a nickel and turned the crank. Then you looked through the slot and saw a series of pictures flop down like a pack of cards in front of you. Despite the flicker and other crudities of the apparatus, there was a strong illusion of movement in the figures shown on the flopping cards. The chorus girl appeared to kick, the funny man slipped on his banana peel, and the lovers put their arms around each other and kissed. These were the first crude motion pictures. They consisted of perhaps a hundred still photographs taken in the following manner.

If a kick were to be shown, the first picture would be taken of the girl standing with both feet on the ground. The second picture would show one foot turned and knee bent ready to lift the foot in the kicking motion. The next picture would be taken with the foot raised a few inches above the floor as the kick started. Successive pictures would then be taken with the leg farther and farther up, until the last of the series would show the girl with her foot and leg extended at the height of the kick. Then another series of pictures would be taken in the same way showing the return of the girl's foot to the floor.

When these pictures were put together and shown in rapid succession in the slot machines, the illusion of leg movement would be accurate. Here is the reason for this illusion. If you look hard at any object, and then close your eyes or drop a shutter between your eyes and the object, you continue to see that object for a fraction of a second after the eyelids have closed or the shutter

has dropped. This fact is due to a chemical physiological effect on the retina of the eye itself. The photo-chemicals of the retina have been changed by light from the object looked at. For a fraction of a second these little organs of the retina remain in their changed condition, and as long as they so remain, the individual will continue to experience the sight of the object which he had previously looked at. When a series of pictures such as those described are shown in rapid succession, the second picture in the series registers upon the retina while the image or trace of the first picture is actually present. Therefore, the person who looks at the two pictures in succession perceives no gap between them, and it looks to him as though the object or person looked at actually moved from one position to the next.

Of course, in the early slot machines, the succession of pictures was comparatively slow. As a result, there was a noticeable pause between the pictures, which gave the effect of flicker. In the silent motion picture projecting machine, the successive pictures printed on a celluloid film are shown in much more rapid succession. This succession is so rapid that the person watching cannot observe the transition from one picture to the next. Therefore, there is no flicker or break between the pictures, and the total effect is one of natural movement of people and objects on the screen. In order to show successive pictures of movement, a correspondingly rapid successive series of pictures must be photographed by the motion picture camera.

Mechanical devices were accordingly developed to draw the recording film rapidly past the lens of the camera, with a correspondingly synchronized device for opening

and shutting the camera shutter in front of the lens a specified number of times each second. In the old style of motion picture camera, the film was moved past the lens by hand. A spool of undeveloped negative would be inserted into a portion of the camera called the magazine. It would then be threaded in such a way as to pass across the lens to another spool in another portion of the camera, just as kodak film is fastened to a winding spool in amateur kodaks. The photographer would then wind the film on the empty spool or reel by means of a crank which he turned by hand. Thus, the speed at which the film passed in front of the lens was always somewhat variable, and the whole operation required long experience and training on the part of the camera man.

The modern motion picture camera winds the film inside the camera by means of an electric motor which is automatically regulated to wind the film at the rate desired. This requires the operator only to set the motor at a given speed.

All this sounds complicated enough. But it is simplicity itself in comparison to the additional process involved in shooting sound pictures. Here, the sound itself is photographed on what is called a sound track at the edge of the film. You can see at once that this necessitates the addition of a new and extremely complicated set of apparatus to catch the sounds of voices, music, and other noises, translate them into rays of light, and then register the light rays on the edge of the moving film properly synchronized with the pictures that are being simultaneously registered on the same film.

The electrical and mechanical principles of this new sound photography can be made clear without going into

the confusing details of specific inventions and devices. How, in the first place, can sound waves be translated into light waves? The sound wave is a movement of the air itself. When an actor speaks or when a musical instrument is played, the vocal cords of the speaker or the vibrating of the musical instrument sets up a series of air waves in the air immediately adjoining the speaker's mouth or the mouth of the musical instrument. These sound waves travel quickly in all directions until they strike the ears of people who are sufficiently near the speakers or musical instruments. Nature has designed our ears in such a way that when sound waves strike them, certain brain currents are caused which give us the consciousness of sound. Thus, we can hear the dialogue or music if we are near enough to their source so that the air waves will travel from speakers or musicians to our ears without interruption. But we cannot, naturally, see sound.

How, then, can a sound wave be caught and changed into such a form that it can be photographed? Only light waves can be photographed. That is to say, rays or waves of light are of such a nature that they produce chemical changes on a sensitive film or plate. These chemical changes are then fixed permanently upon a recording material, so that a permanent record of the light rays which originally struck the photographic film is produced. If, then, we can translate sound waves into light waves, we can easily produce a permanent sound record on a photographic film. This is the way the trick is done.

Light waves are not air waves at all. Light vibrations travel through what used to be called the ether. You can think of ether as an incredibly minute substance which is so fine and which moves so rapidly that it inter-

penetrates all particles of air and all grosser material substances with which we are familiar. The tiny ether particles are, by their very minuteness, freed from the control of grosser substances such as the air. Light rays are really waves set up among these tremendously fine particles of ether. Thus, you can understand immediately how light waves can actually pass through certain substances which we call transparent or translucent, whereas sound waves cannot pass through these substances at all. You can also understand how light waves travel at very much higher rates of speed than do sound waves. This fact has an important bearing upon the new sound photography, which we shall have occasion to refer to later. For the moment, however, we are concerned with the device which catches or registers the comparatively gross and material sound waves and translates these waves of the air into minute light waves of the ether.

This translation of the coarse air waves into fine ether waves cannot be made all in one process. We are compelled first of all to translate sound waves into electrical waves or currents. Then we amplify or increase the force of these electric currents and finally translate the electric current into a fine ether wave of light.

The translation of sound waves into electric currents is a comparatively simple affair which is familiar to everyone who has used a telephone. When you speak into the transmitter of a telephone, the air waves of sound, caused by your voice, make a small metal diaphragm in the telephone transmitter vibrate back and forth in resonance to the sound. As the diaphragm vibrates back and forth, it changes the quantity of electric current which is passing over the circuit, connecting the transmitter into which you

speak with the receiver held to the ear of a person perhaps several hundred miles away. Each time this electric current is made to vary by the air waves of your voice, the current, in turn, moves another diaphragm in the receiver, and this second diaphragm translates the vibrations once more into air waves, thus producing the exact sound of your voice in the ear of the person listening.

In the case of the ordinary telephone, therefore, air waves of sound are translated into electric waves and then back again into sound waves. The microphone which is used to pick up sounds for radio transmission, and also for sound pictures, amounts to little more than a highly sensitized telephone transmitter. The same principle of translating air waves of sound into variations of electric current is employed in both. In the microphone apparatus, however, as used in sound pictures, tiny electric currents, generated by the microphone in response to sounds made by the voices of the players, must be translated still further into still finer waves of light, instead of being changed back again into sound waves, as in the case of the telephone.

This can easily be done by connecting the microphone currents with the electric current of an electric light in such a way that the brightness of the electric light is varied in accordance with the variations in the microphone currents. When appropriate connections have been made in this way, so that the microphone currents are superimposed upon the electric lamp circuit, the lamp will flicker up and down in brightness in exact correspondence with the sound waves of the voice registered by the microphone.

We now have the essential parts of our sound photog-

raphy apparatus. Waves of sound set up by the players' voices are caught by the microphone. The microphone turns these sound waves into electric currents. Electric currents, in turn, are made to change the brightness of an electric lamp, which is kept constantly lighted. Now it is simply a question of photographing the changes in brightness caused by the flickering light.

There are two ways of recording on film the changes in illumination corresponding to the sounds picked up by the microphone. The first method is as follows: the electric light is focused through a slit upon the film sound track. A tiny bar of light, corresponding to the size of the slit, falls constantly upon the film. But the intensity of this light will vary continuously as the sounds, registered in the microphone, vary. When the light is brightest, the sensitive film upon which the light falls will undergo the most complete chemical development. In other words, a very light gray or white bar will be recorded eventually upon the positive film. When the light is reduced in intensity by the effect of the sound waves emanating from the microphone, the area of the sound track upon which the light falls will undergo a comparatively slight development. In this case, a much darker bar will ultimately appear on the positive film. According to this system of photographing sound, the voice sounds appear, ultimately, on the positive film sound track as a series of light bars of varying brightness. (We will discuss presently the manner in which this photographic record is translated back again into sound in the projector apparatus. For the moment, we are only concerned with the original photographing of the sound.)

The second method of recording the light variations is

as follows: instead of varying the intensity of the light by means of electric currents emanating from the microphone, these same microphone currents are made to vary the area of film upon which the light falls. Instead of superimposing the microphone currents directly upon the electric light current, the microphone currents are connected with an apparatus which varies the size of the slot through which the light falls upon the recording film. The brightness of the light is kept constant. The slot through which the light shines is varied in size by the microphone currents. Thus, the area of sensitized film which is developed by the light beam varies in accordance with the sounds registered in the microphone. When the finished positive film record is shown, therefore, we find light bars of equal brightness, but of varying lengths, on the sound track.

The first method of photographing sound is known as the method of variable density, and the second is known as the variable area method.

The Fox Movietone sound recording apparatus uses the variable density method, while the R. C. A. Photophone uses the variable area method. The latter method is much more reliable than the density method of recording, because variations in density may be caused, not only by the original light variations, but by irregularities and uncontrollable variations in the developing of the film negative, as well as in the printing of positive films from the negative. In other words, when the variable density method of photographing sound is used, there is considerable likelihood that the record will not be an accurate one, because the accuracy of the original record may be upset in the process of developing and printing the film. With

the variable area method, on the other hand, there is little likelihood of this type of error creeping in. The variable area method is, on the whole, the more reliable of the two.

Let us forget, for the moment, all the technical details of the processes just described, and think of them in the simplest possible terms, as follows: a player on the movie set speaks the line, "I love you." As the words leave his lips, sound waves travel from his mouth to the microphone. As the microphone vibrates to these air waves, electric currents travel from the microphone to an electric light shining through a slit on a moving film in the camera. As the microphone currents strike the electric light, it flickers, changing its brightness in sensitive response to the microphone current. Or perhaps, instead of a light flickering, the slit through which the light shines upon the film changes its size automatically. The different quantities, or the different intensities, of light set up minute ether waves, which travel rapidly to the sensitized film. When these strike the film, they cause the chemicals on the film to change or develop in various degrees of light and shade. These chemical changes on the film are then fixed, and furnish permanent records, corresponding precisely to the original sound waves caused by the words, "I love you," which the actor spoke. "I love you" then becomes, in photographic form, a series of black and white lines on the edge of a strip of celluloid.

But these black and white marks on the sound track occupy only a very narrow section of the film. Alongside them is recorded a series of photographs. The photographs show the face and lips of the actor, who says, "I love you," in various stages of the movement necessary to speak these words. In short, while the sounds of the words

have been translated into light rays and photographed on the edge of the film, other light rays have traveled directly from the face of the actor through the lens of the camera and have left their pictorial record on the same strip of film. If the photographs of the sound and the photographs of the actor are recorded at precisely the same time on the same strip of film, then the two are said to be synchronized. In other words, synchronization means simultaneous timing of sound record and pictorial record upon the film. If the sound recording apparatus is built into the camera, then the sound and picture records are automatically and perfectly synchronized. But other methods of synchronization are required when sound and picture records are made separately.

On the sound stages in big studios, the picture record is usually taken on one film, and the sound record on another. The film upon which sound is recorded is run in a special room completely shut off from the rest of the sound stage. Yet, the film upon which the sound record is made must be run at precisely the same speed as the film in the camera upon which the pictures are recorded. Marks are then made on the two strips of film, so that the records can be matched and subsequently printed upon the same film. Synchronization, according to this system of recording, is done by means of electric motors winding both strips of film, and so connected and regulated that they can be started and stopped simultaneously and run at precisely the same rate of speed. In studio parlance, these two motors, thus connected, are said to be interlocked.

When several actors are performing on the same set, a number of microphones are generally required to catch

the different voices. The electrical connections from all of these different microphones are led into the sound-proof room, usually called the monitor room. Here the different microphone currents are brought together through an electrical instrument known as the mixer.

In the monitor room sits a sound monitor, who mixes the currents from different microphones in such a way that the best possible sound effects are produced. This man makes an effort, by manipulating the mixer, to equalize the volume of the voices of different actors, or to differentiate them as may be required by the scene enacted. Also, if an orchestra is playing simultaneously on the same set, the microphones register the orchestration, and this is also regulated through the mixer, so that the musical sounds do not drown out the dialogue and other necessary sound effects.

The monitor has a receiver connected to the microphone circuit, and he can actually hear the sounds from the stage in precisely the same manner that the motion picture audience will ultimately hear these same sounds in the theater. One or more dialogue rehearsals are usually held on the stage before the picture and sound recording apparatus are interlocked. The monitor then reports to the director by telephone or loud speaker whether or not the voices of the different individuals on the stage are recording properly. If one is too loud, or if another is too far from the microphone, these faults are corrected before the scene is actually shot.

After the preliminary tests are made, the director, or one of his technical assistants, calls "Interlock." This order is transmitted to the sound room over a special telephone, and the necessary connections are made by the



THE "HEART" OF TALKING PICTURE PRODUCTION

The "mixing" room, in which the volume of the players' voices is controlled during the recording process, is located next to the ceiling of the sound stage. (Courtesy of Paramount.)



FANNY BRICE MAKING HER TALKING PICTURE, *My Man*

The operator in the foreground is working the controls which govei the volume of sound as it is carried to the recording apparatus. (Courtesy of Warner Bros.)

operator. After that, every one on the entire sound stage must keep absolutely silent, since every sound that is made will be recorded on the sound film along with the dialogue or music which is being shot.

The lights on motion picture sets are, of course, intensely bright and very hot. Swarms of flies collect, as if by magic, around these lights. The buzzing of these flies in the microphone makes a record which later sounds like the rasping of steel files. Before the sound and picture apparatus are interlocked, therefore, an assistant director carefully sprays the entire set with a fly poison which at least reduces the number of insects, so that their buzzing becomes less noticeable and finally inaudible.

Rubber or felt-soled shoes must be worn by the director and all his assistants. The actors themselves usually wear shoes especially prepared for sound picture taking. The squeaking of a new shoe records very easily in the microphone and when reproduced in a projection room sometimes sounds like the snapping of firecrackers or the crackle of twigs in a forest. If a sound stage is not completely insulated from all outside sounds, an aeroplane passing high over the studio may drown out the sound record of an entire scene. Stray cats mewing or scratching about the set have sometimes cost the company thousands of dollars in destruction of sound records.

The sound of the motor and gears in a picture camera was found to be so loud that it badly marred the sound records. This difficulty was first overcome by building sound-proof booths with thick plate glass windows like the portholes of a steamship, through which pictures might be taken. The camera and the operator were placed inside the booth before the sound and picture recording

apparatus were interlocked. In this way, the sounds of the camera were not recorded on the sound film. The camera booths were placed on wheels, or "dollies," so that they could be easily moved around the set.

There has been developed a camera, however, which is said to be perfectly noiseless, so that sound-proof booths are not necessary. Fiber gears are substituted for steel, and fiber plates for steel plates. Solid brass bearings are substituted for ball bearings.

With regard to synchronization by the method just mentioned, the interlocking process itself sometimes fails because of undetected faults in the electrical apparatus. For instance, during the filming of *Broadway,* the work of an entire day had to be done over, because the interlocking system between the sound room and the picture camera "went haywire," as the studio saying goes. It was later discovered that one of the synchronized motors failed to run at its proper speed because of some minor defect in the wiring. The cost of one day's retakes, due to such a defect in the interlocking system, may run as high as $25,000 or $30,000. Is it any wonder, then, that motion picture producers were thrown into consternation when sound began to come into the movies?

Still another method of synchronizing the sound record and the photographic record is known as "dubbing" the sound on the picture film. A silent picture may be photographed in the usual way, without any sound apparatus whatsoever on the set. The film is then developed and run in a projection room in which sound recording apparatus is set up. An orchestra plays an accompaniment to the silent picture as it is shown on the screen, and the orchestration is recorded on a separate sound film, which

is synchronized with the film upon which the pictures are already recorded. Then the two strips of film are taken to the laboratory, and the sound and picture records are put on the same film.

This process of dubbing on orchestration or other sound effects, such as the shooting of guns, the squealing of pigs, the roaring of floods, etc., may be performed in the same way on a film which already carries both picture and dialogue records. The volume and intensity of the music and other sounds are then softened in the process of dubbing, so that the dialogue comes out clearly against the background of rushing water or violin obligato. This type of synchronization is most frequently employed when dialogue takes place supposedly in the back room of a night club, with an orchestra playing on the stage behind closed doors. In this situation in real life, conversation in the room could be heard very distinctly, while faint orchestra tunes would creep in as a background from the distant stage. It is up to the laboratory technicians to prepare the sound record in such a way that it will give the natural intensity of sound when combined with dialogue and picture records on the same strip of film.

There is still another method of recording sound and synchronizing it with a strip of ordinary silent picture film. This is the so-called Vitaphone record, first used by the Warner Brothers. According to the Vitaphone method, the sound record is simply recorded on a wax disc similar to a phonograph record. The disc record is synchronized electrically with the sound film record in precisely the same way that the sound film is synchronized with the silent film by the method of interlocking. In making records on the Vitaphone, the sound vibrations are picked

up by a microphone, and the microphone currents are led to an electric recording device which moves the needle on the surface of the wax record.

The chief differences between the Vitaphone discs and ordinary phonograph records are these: Vitaphone discs are much larger than phonograph records. Furthermore, in the phonograph record, the needle starts its marking on the outer circumference of the record and travels toward the center, while on the Vitaphone records the process is exactly reversed. The original wax master record, made simultaneously with the silent picture film, is then used as a pattern for any number of disc records to go with the prints of the picture film. It is a curious fact that the Vitaphone method for sound recording of pictures is precisely the method first attempted by Edison before modern moving pictures were developed. It is said that Edison first began to develop motion pictures with the purpose of furnishing visual accompaniments for his phonograph records. But he gave up the task, apparently convinced by the imperfections of his apparatus that sound pictures would never please an ordinary audience. The Vitaphone method of recording sound is considerably simpler than the Movietone or Photophone methods. But the Vitaphone sound reproduction results are considered by a majority of picture producers to be distinctly inferior to either Movietone or Photophone sound reproduction.

Real sounds do not always reflect reality when projected on the screen. A resined string drawn across a drum gives a far better imitation of the roar of a locomotive than does the engine itself. For sound purposes, a riveter makes a highly satisfactory machine gun. All

of the old problems of photography are being repeated in a new form here. Just as natural colors fail to reproduce their relative values when translated into black and white, so with natural sounds. This means that many ingenious minds must work out a multitude of tricks in order to produce the effect of reality. As for the writer of the story, he should feel free to use any sounds which will intensify drama or character as well as the reality of the setting. For the next few years, he will probably be rebuffed by producers, who will tell him that some of these sounds cannot be reproduced. His answer at this point should always be: "Get busy and learn how to reproduce them."

PROJECTION

So far, we have dealt with the various methods by which sound is photographed or recorded on vitaphone discs. We have now to explain how these photographic records of sound are translated back into audible sound waves in the motion picture theater. You will remember that our first problem was the translation of air waves of sound into electric currents, and thence into ether waves capable of being recorded on a sensitized film. We now find ourselves confronted with the problem of reversing this entire process.

We have to start with light waves, governed by the photographic record, which must be translated into sound waves. The process of photographing sound involves the transforming of gross air waves into fine ether waves. Now, the next problem is the process of transforming fine ether waves into coarse or gross air waves. Both of these processes require the intermediate step of transformation

into an electric current. Our light waves, which originated in the photographic sound record, must then be transformed, first into electric currents, and these electric currents, in turn, may be transformed into air waves of sound. A wholly different type of apparatus from that of recording is required in solving the problem with which we are now dealing.

A small photo-electric cell is the device used to perform the first of these steps. A photo-electric cell is a piece of metal fastened inside of a vacuum tube. Certain metals are selected for this purpose because of their peculiar ability to give off electric currents when light of a certain sort is focused upon them. The metals used are selenium, sodium, and potassium. The reason sodium and potassium are enclosed in vacuum tubes is that these metals become chemically active when permitted contact with the oxygen in ordinary air. Thus, we see that the photo-electric cell is essentially a simple device which utilizes the natural properties of certain metals to translate sound waves of air into electron waves of the electric current.

When a beam of light falls upon the photo-electric cell, the cell immediately sets up a minute electric current. These photo-electric currents are so tiny that they cannot be used in any practical way without amplification. Therefore, audion tubes similar to those in our ordinary radio sets are put into the circuit. The audion tube simply catches the photo-electric currents and amplifies or increases them to a strength necessary to operate sound-making devices in the loud speaker. As many audion tubes may be put into the circuit as seems desirable. The more the photo-electric current is amplified, of course, the more strenuously the electric sound-making

apparatus will be activated, and the louder the sounds issuing from the loud speaker will be.

Let us see now how this photo-electric cell is used to translate black and white marks on a strip of film into tiny electric currents. The nature of the cell, as above described, is such that the brighter the light which is thrown upon it, the greater will be the volume of the electric currents coming out of the cell. An electric light in the projection machine is so focused that it shines directly through the sound track of the film on to a photo-electric cell. When a light area of the sound track passes in front of this light, a great deal of light will shine through it on to the photo-electric cell, and a comparatively large volume of electric current will flow out of the cell as a result. When a dark bar appears on the sound track, the light shining through it will be correspondingly interrupted. As a result, the photo-electric currents will be comparatively small.

No matter whether the sound track is recorded by the variable density method or by the variable area method, the same principle holds true with respect to its interruption of light focused upon the photo-electric cell. The principle, however, is very simple. The greater the light area on the film, the more light will fall on the photo-electric cell, and the more electric currents will be generated by the cell itself. By this process, as you can readily see, sound photographs are translated into electric currents of varying strength. It is now a comparatively simple matter to amplify or increase these currents until they are able to activate the vibrating diaphragm of a loud speaker apparatus.

The principle of the loud speaker is familiar to us all

since the advent of radio. We are also familiar with the vacuum tube, more properly called an audion tube, which takes the minute radio waves coming through the ether and amplifies the tiny electric currents caused by these waves into larger electric currents capable of mechanical movement in the diaphragm of a loud speaker. Precisely the same sort of audion and vacuum tubes are used in amplifying the photo-electric current to the strength necessary to move the diaphragms in the loud speakers behind the screen of the moving picture theaters.

The diaphragm, when it moves back and forth in response to these changes of electric current, sets up air waves which register upon our ears as sound. The entire level of the intensity or volume of the sound from behind the screen may be regulated by using a greater or lesser number of amplifying audion tubes in the circuit between the photo-electric cell and the loud speaker. Of course, there are many refinements of electrical apparatus which enable the operator to regulate the sound effects. But the essential principle of the translation of rays of light, coming from the sound track of the film, into photo-electric currents, and finally into air waves of sound emanating from the loud speaker, remains the same throughout all the complex devices used to give the requisite refinements to the sound reproduction process.

We now have before us the entire process of sound photography and sound reproduction. Starting with the original sound waves of the air caused by the speakers' voices, we know that these sound waves are transformed into electric waves or currents by means of the microphone apparatus. The tiny microphone currents are then transformed into varying intensities of light by super-

imposing the microphone current on the illumination current. These variations in the illumination or flashes of light are then photographed on the sound track of the film. In the projection, the sound track of the film is made to vary the intensities of light which fall upon the photo-electric cell. The cell then generates a strength of electric current, corresponding to the light variations. The tiny variable electric currents from the cell are then amplified sufficiently to operate the loud speaker diaphragm, and we have sound waves of the air once more corresponding very nearly to the sound waves originally set up by the vocal cords of the actors, or by the vibration of the musical instruments on the stage. The cycle is now complete.

Of course, the reproduction of sound, as we have it today, has many faults and shortcomings. Chief among these is the difficulty in detecting and recording the individual qualities of the actors' voices in such a way that the personality of their voices is preserved on the sound record. There are many technical reasons for this. Roughly, we may summarize these difficulties as follows:

The human voice is very rich in overtones and difference tones, as they are called. The total sound quality of the voice, including these overtones and difference tones, is called timbre. The timbre of a voice is a subtle and very complex combination of sounds. The first sound recording apparatus was not sufficiently flexible or capable of sufficiently fine modulations to pick up the majority of the difference tones and overtones which give the characteristic timbre to the actor's voice.

This difficulty with the recording apparatus, and corresponding difficulties in the reproduction of sound, are

gradually being eliminated by perfection of the electrical apparatus and the technique of recording sound. In the first few sound pictures, very little difference could be detected between the voices of the men and those of the women.

The principle of resonance, which plays a great part in all music, speaking, and theatrical acoustics, is simply this. If you have a column of air contained in a wooden box, such as the box of a violin, for example, you have what is called a resonator. The shape and quantity of the air column will cause it to vibrate sympathetically with certain musical tones. These sympathetic vibrations of the air column have the effect, in turn, of increasing the tones with which they vibrate. There is a laboratory instrument of this sort which can be set so that the air column within it corresponds precisely to a given note. By placing this resonator to the ear, one can pick a single note out of a complex orchestra number, so that the single note is all one hears.

In the same way, sound recording apparatus tends to be selective. It tends to pick out certain notes and certain octaves of tone and to favor them in the sound records, as against other tones and other octaves. Thus, a woman's voice in the early sound pictures was recorded either as a squeak, or as a deep voice, similar to that of a man. The principle of resonance was responsible. The sound recording and transmitting apparatus tended to select certain tones to the exclusion of others. This difficulty, also, has now been corrected to a great extent, and improvements are going forward rapidly in all the sound laboratories of the big producing companies.

The refinements of electrical apparatus whereby these

improvements are being made are far too complicated to discuss here. But we may say from our own personal knowledge of the improved technique now being used in sound recording that much greater artistry of sound reproduction will be heard in all the motion picture theaters within the next few months. Sound recording and reproduction in motion pictures is now in a much more advanced stage than at the corresponding period in the development of the phonograph, and promises to progress as rapidly toward perfection as unlimited capital and tremendous popular interest can guarantee.

A great deal of the perfection of sound reproduction depends upon the type of loud speaker used by the theater exhibitor and upon the placing of these loud speakers with respect to the screen. In small motion picture theaters in which the sound equipment is necessarily of an inexpensive variety, only one or two loud speakers can be used. These are usually placed near the top of the screen, directed downward at such an angle as to give the best illusion of sounds emanating from the mouths of the actors on the screen. With more expensive sound equipment, however, any number of loud speakers may be used, and experiments in placing these in various parts of the auditorium are now being tried. It is even possible to make separate sound tracks for orchestration and for dialogue.

The loud speakers for orchestration can then be placed in the orchestra pit of the theater, so that the orchestra numbers are heard just as they used to be in the legitimate theaters when the orchestra sat in front of the stage, while the dialogue is heard coming from the mouths of the speakers on the screen.

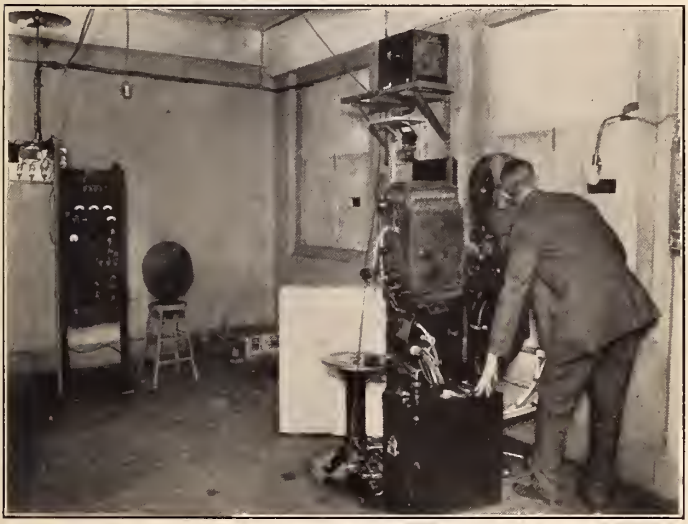
By means of refinement of recording and reproduction apparatus now being experimented upon, it may be possible to switch the sounds from one loud speaker to another behind the screen, in such a way that the words of one player seem to emanate from his position on the screen and the words of another player from an opposite portion of the silver sheet. These and many other refinements of sound technique are being carefully considered and experimented with, both by the big production companies and the motion picture exhibitors.

Sound recording requires fifty per cent greater speed in moving the film past the camera lens than does the filming of silent pictures. This makes it necessary for both picture and sound-recording cameras to be moved at the rate of ninety feet of film per minute instead of sixty. This results in the taking of twenty-four frames per second instead of sixteen. In other words, eight more pictures, or frames, are taken each second with sound pictures than were taken in the old silent photographic process. The result of this additional number of individual pictures is greatly to slow up the movements of characters as they appear on the screen when the pictures are projected. Since a greater number of individual pictures of different stages of movement are shown, the slighter the variations of bodily position will be between each pair of pictures. Therefore, when the picture appears on the screen, the movements themselves will seem to be very much slower than in the silent pictures. This is a fact which many motion picture audiences have sensed without clearly understanding. The whole tempo of sound pictures seems noticeably slower than the tempo of silent pictures. The slowness is easily observable, though it is



A Soundproof Camera Booth

Note the heavy padding on the inside of the box to deaden the noise of the camera. (Courtesy of Warner Bros.)



Synchronizing Film and Sound

The interior of the projection room in a motion picture theater. The Vitaphone disc may be seen at the rear of and below the projection machine. (Courtesy of Warner Bros.)

not easy to note the relative speeds of any particular movement or action.

There is one difficulty with reproduction of sound for talking pictures, which a great many people have already noticed and commented upon. As we have previously noted, light and sound travel at different rates of speed. Light travels 186,304 miles a second, and sound, 1,085 feet a second. This means that the rays of light from the screen may reach the eyes of the audience considerably before the air waves of sound from the loud speakers behind the screen reach their ears.

It is the same way with a flash of lightning and the thunderclap which follows. You see the light first, and then, a number of seconds later, you hear the sound of thunder which originated at the same time. It is an old rule that you can tell how many miles away a storm is by counting the number of seconds that pass between the flash of lightning and the sound of thunder. If, then, talking pictures are synchronized so that the sound and light from the screen reach the main body of the audience simultaneously, there is bound to be some error in the synchronization for people who sit at the sides or extreme back of the auditorium. It is possible, of course, to move the sound track ahead on the film, so that the sounds actually start before the light rays from the pictures to which they correspond. But if this is done, and the pictures are thus accurately synchronized for the people at the back of the auditorium, the synchronization will be wrong for the people in the front rows and middle of the theater. Various devices to correct this difficulty are now being worked on.

It is possible that loud speakers may be introduced at

other points in the theater beside the screen itself, so that the dialogue may be conveyed to different parts of the theater simultaneously, with the chief volume still coming from the screen, so that the illusion is not spoiled. Within a comparatively short time a number of such devices will be in use.

CHAPTER XI

COLOR

No account of modern motion pictures would be complete without a chapter on color. Color in pictures apparently has come to stay. There are many reasons for this, chief of which is the necessity for color in "girl shows," revues, and musical entertainments which are now taking their place in motion pictures as a result of sound recording and reproduction.

Motion picture color photography has been known since 1902, but did not become popular until July, 1929, when the Warner Brothers released *On With the Show,* a revue with sound and all-color photography. The picture made a tremendous impression, both upon the movie going public and upon the motion picture producers, for its extraordinary color effects. At about the same time, some short two-reel musical reviews in color, and *The Hollywood Revue,* containing several delightful color sequences, were released. And now the motion picture industry stands committed to color as a basic feature of its production program for the year 1929-1930, with a promise of increasing amounts of color in all pictures to follow in the future.

There are two possible types of color processes in motion picture photography. These two are technically termed "additive" and "subtractive" processes. Although only subtractive processes are commercially in use at this

time, we may briefly describe the principles underlying both types.

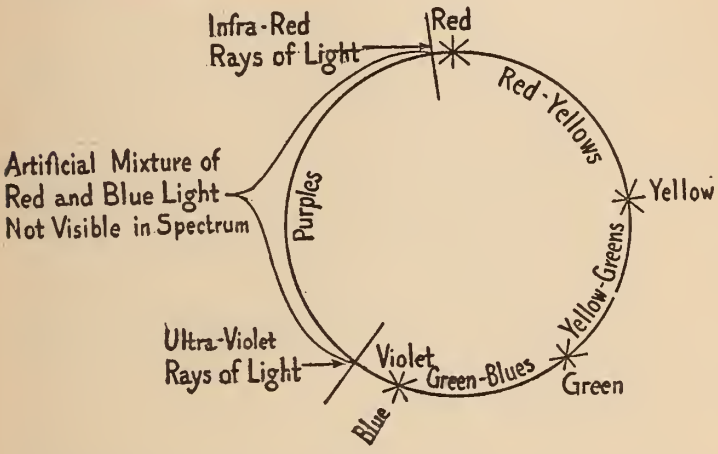
ADDITIVE PROCESSES

The word additive, as used in this connection, means that other colors are added to white in the process of photographing and reproducing color. The word subtractive means that white, or some of the components of white, are subtracted from the colors which are left on the film and which are subsequently shown through the projecting apparatus on the screen. The general method of adding colors to white on the film consists of passing color filters between the camera lens and the film in such a way that only rays of a certain color are permitted to pass from the object to the film at any given moment.

To understand color photography, you must first acquaint yourself with certain simple preliminary facts about color itself. There are about 230 separate colors. But if we arrange this whole series in the form of a circle or a rectangle, we find in it four high spots, or "nodal points"—red, yellow, green, and blue. Each of these gradually blends into the color next to it in the series, forming intermediate colors, which in turn change into the next of the nodal colors.

This psychological view of color must be carefully distinguished from its physical description. Physics describes colors as wave lengths of light, the longest of which lie at the red end of the spectral series, and the shortest at the blue. Different wave lengths of light falling on the retina of the eye produce different color experiences in the brain. Three of these light waves differently combined are capable of producing the entire 230 color

experiences. Why this is true we do not know. There are several combinations of three different wave lengths which can be selected to accomplish this purpose. The most convenient of these is the combination of red (or orange-red), green, and blue (or indigo blue). These three physical wave lengths do not correspond precisely to any of the psychological nodal points, although they lie very close to the red, green, and blue of the psychological color spectrum.



These three light waves of the physical spectrum may be termed "physical mixture points." If they are combined in equal quantities, we get a pure white light. And we can produce the entire range of the 230 color experiences by combining any two in equal quantities or all three in unequal amounts and exposing the eye to the resultant mixed light.

Color photography depends on the fact that three colors of light appropriately combined on the motion picture

screen are capable of producing all the natural colors. If we can photograph all the red, then all the green, and finally all the blue in a given object, we have a complete physical color record of the object photographed. To reproduce its original natural colors, then, we need only to combine these three separate color photographs in precisely the same proportion of light intensity as they existed in the original object. The human eye then sees it on the motion picture screen in its original natural color by means of this recombination.

The first attempts at color photography made use of this principle. Three different pictures of the same object were taken in rapid succession—first red, then green, then blue. The pictures were made by passing colored glass or a colored gelatine slide, called a "color filter," between the lens of the camera and the sensitized film. The process took place exactly as though the photographer first held a piece of red glass behind the lens and snapped a red picture of the object, and then photographed a green and a blue picture of the same object, using green and blue glass behind the lens.

In the motion picture camera, of course, the film was cranked in such a way that three successive frames were exposed to the lens at precisely the same moment that the corresponding color filter revolved between the lens and the film. As a result, each object or movement of an object recorded on the motion picture film required three separate frames to complete the color record. This meant that the film and camera shutter had to be moved very much faster than in ordinary motion picture photography. When this same film was run through a projection machine, in order to throw the colors on the screen, color

filters had to be put in front of the film again in the same order that the original filters were passed over the lens of the camera. In other words, in the projection machine, when the red picture was illuminated, a red color filter had to be placed in front of it. When the green picture was shown, a green filter was swung into position, and when a blue picture came into line with the lens, a blue filter was similarly interposed between the picture and the screen.

In this way, red, green, and blue pictures of the same object or the same movement of an object were thrown on the picture screen in rapid succession. At this point, we must mention another psychological law of color. Whenever the human eye is exposed to color, it goes on seeing that color for about one-eighth of a second after the color itself has been removed. We may call this the persistence or inertia of color vision. Because of this fact, as you can see, the motion picture audience who look at the red picture thrown on the screen would continue actually to see that picture for about one-eighth of a second after the color on the screen had changed. Thus, they would still be seeing the red picture when the green picture appeared. In the same way, they would continue to see both the red and the green picture when the blue picture appeared. Thus, the human eye itself would automatically blend the three differently colored pictures into a single unit experience of color. In short, the human eye had to serve as a color mixer for this kind of colored motion picture.

The three separately colored pictures were, in fact, mixed in the human eye, with the result that the original natural colors of the object would be experienced by the

audience. A more or less successful application of this type of additive color process was made by the old Kinema Color Company. Colored motion pictures, starring many famous players, were shown throughout this country and England by means of the Kinema Color process. The chief trouble with this process lay in the extreme rapidity with which the motion picture film had to be run through the projector. As a result of this required superspeed of the film and the over-rapid exposure of the eye to different colors, an effect of pulsation was experienced by a majority of Kinema Color audiences. This pulsation probably consisted, in reality, of a fatigue in different parts of the eye as a result of being compelled to accommodate too rapidly to different pictures. A later refinement of this process made it possible to eliminate pulsation by running the film at a still higher speed, so that the eye did not even have time to accommodate itself separately to the individual color pictures but only accommodated itself to a single group of pictures, giving the total effect of natural color. But this very high rate of speed proved impractical for many technical reasons. Also, there were visual effects called flicker and fringe which were never successfully eliminated from the Kinema Color process.

Flicker is an effect which is due to the change in brightness of the light on the screen, so that first the picture appears very bright, then darker, the brightness and darkness of the picture alternating rapidly yet noticeably to the audience. Fringe consists of a sort of streaking of one of the mixture colors, especially following the rapid movement of an arm or a leg in the picture.

The technical reason for fringe in the Kinema Color

was as follows: when a particularly swift movement of the arm, for instance, takes place, the limb would appear in slightly different position in the differently colored pictures. Suppose that in the red picture the arm was at right angles to the body. Even though the green frame followed the red with extreme rapidity, the arm may have moved a fraction of an inch downward. When the blue frame came along, the arm might again have moved, so that the three differently colored pictures would each show the arm in a slightly different position. When the three pictures were again shown on the screen, they would not, as you can readily see, correspond exactly. There would be a different position of the arm in the three pictures. Therefore the red arm, which appeared in the first picture, would not be covered entirely by the green arm, which appeared in the next picture. And neither the red nor the green arm would be fully covered by the blue arm, which appeared in the third picture.

As a result, the sight of the uncovered edge of the blue arm would still persist in the eyes of the audience when the next picture, the green one, appeared on the screen. The edge of the green arm also would still persist in the audience's vision when the red arm came along. The total effect of these uncovered fringes, due to the non-correspondence of the differently colored pictures, would be a fringe of color, noticeably red and green, but possibly running through all the different color mixtures of the spectrum, which would appear to follow the edge of the arm as it moved downward to a different position.

This color fringe has never been entirely eliminated from color reproducing processes of this type, though, even as this book is being written, a color company with

considerable capital is attempting to perfect and put on the market a process of this sort.

The motion picture film which carries three successive frames containing red, green, and blue color values is, nevertheless, black and white. The color values in the different frames are latent, and the films are not themselves colored. The only difference which the naked eye can detect in the three successive frames is a difference in shading between different parts of the picture. A red rose in the red frame on the film might appear very light, with its leaves somewhat darker. In the green frame of the same picture, the rose might be darker, and its leaves lighter. And so on. But these differences in development of the film will again give the original colors when exposed behind the color filter of the color that was originally used in taking the picture. A negative film which is prepared in such a way that it is differentially or selectively sensitive to different colored lights is called a panchromatic film. This type of film may now be obtained without difficulty.

Commercially, this type of latent color record on the film is very much more economical and advantageous in every way than a film which is itself colored. The chief reason for this commercial advantage is that panchromatic film can be developed and printed in an ordinary film laboratory without any additional processes or special treatments. If the film itself has to be colored, additional dye processes or chemical conversion processes must be carried out, which require considerable extra expense and time. In the motion picture business, the time element is often more important than are a few extra thousand dollars in the cost of development. A news reel, for

example, done in color photography, might be worth hundreds of thousands of dollars more to the producer if it could be released a week, or even three days earlier. Despite this very great advantage in black and white film carrying latent color values, all of the color processes now being used in pictures require a film which is itself colored.

Though there are other types of additive processes, none has received, as yet, the serious attention of the motion picture producers. One or two other types of additive processes may now be explained.

Multiple Film Processes

Instead of taking three successive color pictures and subsequently projecting them successively on the screen, all three pictures may be taken simultaneously on three separate films. This, of course, might be done by using three different lenses, or three cameras, each with a different colored filter. But such a method would not give three identical pictures, because each separate lens, or each separate camera, would photograph the object at a slightly different angle. Using the same lens, however, prisms may be inserted behind the lens in such a way that three separate images of the same picture can be thrown simultaneously on three separate strips of film. A differently colored filter may then be interposed in front of each of the three separate films.

In projecting pictures taken in this way, a corresponding set of prisms, or similar apparatus, must be placed in the projector, and the three differently colored films carrying exactly corresponding pictures in different colors must be precisely synchronized, so that the corresponding pictures are thrown simultaneously on the screen. This is

a very difficult and commercially impracticable process. But the results which it obtains are beautiful. Theoretically, this is a process which gives perfect reproduction of natural colors, and, as a matter of fact, a very short length of motion picture in perfect color can thus be shown under exact laboratory conditions. But of course the moment the slightest lack of synchronization creeps in, the whole thing is blurred. A slight shrinkage in one of the differently colored films, or a tiny lack of adjustment in the prism or lens, will throw the whole thing out of adjustment, and the picture is ruined.

Multiple Image Process

Another method which has recently been improved by an English inventor is that of taking three tiny pictures in three different colors on the same frame of a motion picture film. This is accomplished by using reducing lenses which take each picture in miniature, so that it occupies only about one-fourth of the frame. Prisms are then interposed in such a way that each picture is placed separately in its own position within the frame. This adjustment must be very exact, so that the tiny pictures fit together neatly within the frame without any overlap. We then have the ordinary number of frames on a film, each frame carrying three tiny pictures, each picture with different latent color values. In projecting this type of film record, a correspondingly elaborate set of lenses and prisms must be used. The color results of this process are not quite so clear or beautiful as those obtained by the multiple film method just mentioned. Because of the small size of the pictures, there is less definition or sharpness of outline, and many of the details of the picture,

which could be recorded accurately on a full frame of picture film, are lost in the reduction of the picture to one-third the size.

As far as now appears, the complicated details of the process, and the subsequent commercial difficulties, are practically as great with this process as with the three-film process, though improvements are now being made which may eliminate some of the practical difficulties in projection.

In describing all the additive processes mentioned above, we have taken them at their best. That is to say, we have described all these processes as using three differently colored filters which alone are capable of giving a perfect reproduction of natural colors. But during the practical use of the Kinema Color process, and at various other times in the development of the additive processes, only two colors have been used. When three differently colored lights are selected, all the spectral colors can be obtained by mixing them in different proportions, as above explained. But if only two slightly different colors are selected, a great majority of the 230 colors can still be obtained by mixing the two basic colors.

The usual method of selecting two colors is to divide the entire spectrum roughly in two. As a result, there appears what is usually called the light half of the spectrum and the dark half of the spectrum. The light half begins with red and ends close to the green. The dark half begins with the green and ends in the violet tints which lie beyond the blue itself. Two colors close to the beginning of each half of the spectrum are selected for a two-color mixing process. A bright red or an orange-red may be selected to represent the bright half of the spec-

trum, and a green or blue may be selected to represent the dark half of the spectrum. When only two colors are used in this way, certain natural colors can never be photographed or reproduced. Yellow, for instance, cannot be recorded, nor can purple or blue itself, if red and green are the basic colors selected. If blue is chosen instead of green, then a true green cannot be obtained, and there is still difficulty in getting yellow, violet, lavender, etc. If orange-red is selected instead of red, a bright red can never be obtained from the mixture.

Use of two colors in a process such as Kinema Color of course has distinct commercial advantages. Only two separate pictures of each object or movement need be taken, instead of three. This reduces both the speed at which the film must be run while taking the picture and also the required speed of the film during projection. It is sometimes asserted, also, that, with the two-color process of the additive type, there is less fringe flicker and pulsation. But, for various psychological reasons, this statement is somewhat questionable. It can be said, at least, that there is very little difference, in these unpleasant effects, between the two-color and the three-color process, provided the film is run through the projection machine at adequate speed for each process.

SUBTRACTIVE PROCESSES

Both the commercial processes now in use in Hollywood are subtractive processes. Both are two-color processes only. They are called Technicolor and Multicolor. In describing the general principles of subtractive processes, it will probably be most practical to use the Techni-

color and Multicolor processes as examples, since they represent the latest developments in this type of color reproduction.

Technicolor

The Technicolor camera, in which a single lens is used, is specially built for color work. Behind the lens is a group of prisms put together in such a way that two separate pictures are thrown on two successive frames of the same film. A revolving color filter is so arranged that these two pictures, a red picture and a green picture, are photographed simultaneously. When the entire series of picture sequences has been recorded, the film is developed, and this represents the negative carrying latent red and green color values on alternate picture frames.

The negatives are now printed on two independent strips of positive film. That is, all the red color values are printed on one strip of film, and the green values on a second strip. These are developed and fixed in the usual way. The two positives are now subjected to a chemical treatment which converts the silver images into what is termed a "mordanted image." A mordanted image is one which has the property of absorbing certain dyes. Thus, a positive having the red records is dyed green, and the green records are dyed red.

When the films are dyed in their primary colors, both sets of colored pictures are transferred to the same side of a new film. In this process, a fresh film, covered with appropriate gelatine preparation, is pressed successively against the dyed films. The gelatine on the fresh film absorbs the dye from the dye film in the same way that a blank newspaper page absorbs the ink from the presses.

This final process of printing the dye images in color on a single film is called the transfer, or imbibition, process. The word "imbibition" refers to the property of the gelatine on the fresh film, which imbibes or absorbs the dye from the dyed film. This process is virtually the same as an ordinary lithographing procedure. The final film print now contains a colored picture, the combination of red and green pictures giving a color mixture which approximates the original or natural colors of the object photographed.

One tremendous advantage of this process is the fact that no new attachment or complicated device need be used on the projection machine. The picture prints contain their own colors and need only be run through an ordinary projector to give colored pictures on the screen. The disadvantages of the process lie in the possible irregularities of color saturation due to slightly different lengths of time during which the film is left in the dye bath; the tendency toward "bleeding" of the colors during the imbibition process; and the fact that some natural colors can never be reproduced with a two-color mixing process.

The bleeding, as it is called, results from the fact that the gelatine on the fresh film tends to absorb dyes, not only in sharp outline of the images actually appearing on the film, but also with a certain spread from these sharp outlines. This is very similar to the way in which ink frequently spreads on cheap newspaper stock, or in an extreme way on blotting paper. This bleeding, or spread of the dye, tends to make the outline of colored objects somewhat blurred and hazy on the final film.

The colors which cannot be obtained by a color process

using red and green primaries are yellow, true blue, violet, heliotrope, purple, and the rest of the blue-violet series. Also, all yellows tend to appear orange on the screen when this process is used.

Multicolor

This is another form of the subtractive process, which uses two color primaries slightly different from those on which the Technicolor process is based. The Multicolor primaries are blue and orange-red.

The Multicolor apparatus is, however, much simpler than that used by Technicolor. It uses any standard motion picture camera, without prisms or color filters. Multicolor furnishes a special attachment which requires only a few minutes to adjust to the camera, and a special magazine containing two films, which are threaded together through the camera, instead of the single film ordinarily used.

These two films are placed emulsion to emulsion, so that the light coming through the lens of the camera shines against the celluloid side of the front film. The front film is covered with an emulsion which records the blue and green end of the spectrum. In other words, a blue-green picture of the object in front of the camera lens is recorded on the front film.

The emulsion on the front film is surface-dyed red, which acts as a color filter for the emulsion on the second, or back, film. The light from the object photographed, after passing through the front film and recording thereon a blue-green picture, passes through a red filter at the back of this film and so photographs a red-orange picture on the back film. Then the two films are separated, de-

veloped, and, at the present time, both films are printed on opposite sides of a double-coated film.

We now have a single film with a latent blue-green picture on one side and a latent red-orange picture exactly opposite it on the other side of the film. These pictures are now treated with chemicals in such a way that the pictures on one side of the film turn red-orange, and the pictures on the other side of the film turn blue-green. This is a chemical conversion process, in contrast to the dye process used by Technicolor.

In the chemical conversion process, the actual chemicals which make the picture record on the film are converted into other colored chemicals, leaving the picture on the film in the actual color desired.

When the prints are finished, they constitute what is called a double-coated film, that is, a film with color picture records on both sides. In the early days of this double-coated film technique, many practical objections to its use arose. The chief objections were based upon the fact that the double-coated film scratched, cracked, and wore out quickly when run through an ordinary projector designed for film with a picture image on one side only. Technicians, however, have developed a special type of shellac which protects this film, so that these practical difficulties are largely overcome. Multicolor has recently announced, however, that they have perfected a single-coated film process which they are about to put on the market.

One of the chief advantages in the use of the conversion process in printing the colored object on film is the fact that chemical conversion proceeds definitely to completion and therefore does not vary from print to

print with respect to the saturation or amount of color in the pictures developed. In the dye process, as we have noted, different amounts of dye may be absorbed, depending upon the length of time the film remains in the dye bath. When the chemical conversion process is used, however, it makes no difference how long the film is left in the chemical solution used to convert the picture image. The conversion process runs to completion, and then stops, so that no further chemical action takes place on the film.

The pictures obtained by this process are more clearly outlined because the imbibition process need not be used. There is no transferring or lithographing in the process, which would tend to result in blurred outlines or blotting paper effects on the final prints. The Multicolor process has, also, certain commercial advantages. It can use, as we have already noted, any ordinary camera without costly special apparatus. New Multicolor camera attachments and magazines can be made to order very quickly, and cost only a few hundred dollars as against the thousands required to build special color cameras. This makes the Multicolor process much simpler and enables the company to deliver the finished prints with comparative speed.

With the primary colors used by Multicolor, namely orange-red and blue, it is impossible to get a bright red on the screen, and its greens tend to have too much of a blue-green tinge. Multicolor has the same difficulty that Technicolor experiences in getting pure yellow, although Multicolor can get a remarkable gold on the screen which is very close to pure yellow. Multicolor experts apparently can get a very good yellow when the color and lighting conditions on the set are exactly right. Multicolor and Technicolor have the same difficulty with helio-

trope, violet, and purple. The chief advantage in natural colors which Multicolor enjoys over Technicolor lies in the beautiful blue achieved by the former process. In outdoor scenes, especially those in which an attempt is made to show sea and sky in their natural colors, the Multicolor results are superior. The under-sea scenes of the *Fox Follies,* before mentioned, were done by that process, and illustrate its perfection better than any other picture.

Both Technicolor and Multicolor companies have recently announced that they are developing three-color processes which will complete the color series on the screen and enable motion pictures to appear in absolutely natural colors. In passing, it may be stated that color beauty on the screen depends fully as much upon an able studio staff as upon the color process itself. To produce a color picture of distinctive merit, costumes and sets should be designed especially with reference to the color process which is to be used. Oversaturated colors and overgaudy or brilliant colors should, on the whole, be avoided. Pastel shades and softer colors give by far the most pleasing and artistic entertainment. If the right colors are selected by the production staff, and conditions on the set are adapted to the color process, we may state without fear of contradiction that colored films may now be produced which will not cause the slightest strain or unpleasant fatigue to the eyes.

CHAPTER XII

COLOR AND THE WRITER

THE first part of this discussion of color is technical. On first thought, it may seem to have little bearing upon the problems of the motion picture writer. But it now seems safe to predict that within a comparatively short time color will become one of the major considerations in purchase and production of motion picture stories. This development was forecast a few years ago in an article by one of the writers, from which the following excerpt may be quoted.

Effective use of colour is now made, very frequently, by expert theatrical producers; though without any basis other than personal experience and native emotional sensitivity to colour. Large motion picture theatres, such as the two or three newest in New York City, make lavish use of coloured lights at nearly all times during the performance. I have been unable to discover any particular system or plan in the selection or timing of colours; but even this promiscuous and often astounding use of coloured light produces a very obvious increase in the pleasure and emotional responsiveness of an extremely heterogeneous and cosmopolitan audience.

In this respect, of course, the black-and-white motion picture has not yet begun to realize its emotional possibilities. If the film action is obvious and melodramatic, the plot may arouse sufficient excitement to obscure the complete flattening out of esthetic background tone and the tremendous loss in emotional stimulation due to elimination of such stirring colour stimuli as the red lips of the heroine, the sparkling blue of sea or lake, and the flowerlike hues of women's costumes at a pictured ball or dance. The producers probably do not realize all the emotional ammunition they are

throwing away, or something would be done to put natural colours on the screen.

Moreover, if the indicated psycho-neural associations between primary colours and primary emotions can be substantiated, the emotional effects upon the audience might practically be dictated, throughout an entire film, merely by emphasizing the appropriate colours in each portion of the play. When motion pictures reach such a colour development, they will possess an esthetic value enabling them to portray realistic, homely emotions that now have to be left off the screen altogether because they fall quite flat when portrayed in black-and-white. Also, the emotions of greater masses of people might be reached and improved through this medium than possibly could be touched through any other.[1]

The time seems to have come when motion picture producers are realizing the added emotional value of color. In one motion picture studio, as this book goes to press, a color program of approximately one picture per month is being put into effect. Stories for these twelve pictures will be selected primarily on the basis of their color possibilities. Already, several stories which had previously been accepted for production have been scrapped, and the story department of this producer has received orders to obtain new stories especially adapted to the color program.

In another studio, orders have been given to the scenario department to obtain an original story especially adapted to utilize the color background of Yosemite Park. In practically all Hollywood production studios, similar story adaptations to color are being made. Many musical revues, college stories, and sporting youth pictures are being planned, largely with a view to their color possibilities. The motion picture writer, while he cannot be expected to master completely all the technical details of the two

[1] W. M. Marston, "Primary Colours and Primary Emotions," *Psyche*, October, 1927.

commercial color processes now in use, should certainly attempt to form a pretty accurate idea of their scope, as well as their limitations. For instance, color pictures which depend for their effect upon outdoor sets will be of comparatively little value to studios using a color process which cannot obtain good blues in sea and sky. On the other hand, a story which emphasized bright red settings or costumes would not be adaptable to use in a studio which had adopted a two-color process with orange-red as one of the primaries.

Again, it would be foolish nowadays for authors to lay the scenes of their picture stories in drab, dull settings in which color is out of place. Stories with unusual and striking color possibilities, which are nevertheless within the scope of the color processes described above, will certainly have a much greater chance of purchase than stories lacking these color potentialities.

If a writer can understand the present use of color in motion pictures, he should then be able to visualize original and pleasing color effects in connection with his major scenes and characters. In writing musical comedies or revues, or in submitting original ideas for pictures along these lines, practical color possibilities should certainly be included in the story or idea submitted. Revues and "girl shows" with sound will depend more and more upon novel color effects for their ultimate box-office values.

EMOTIONAL VALUES OF COLOR

In general, we may say that any color in a picture greatly enhances the total emotional effect of the picture. This has been demonstrated in many different fields

through psychological experiment. In the field of advertising, the effects of color have been carefully studied. It has been found that the public prefers different colors for different types of articles advertised. A suggestive list of the findings from some of these experiments, as reported by A. T. Poffenberger,[2] follows:

Article Advertised	*Color Preference*
Building material	Yellow and orange
Jewelry	Yellow and purple
Breakfast food	Yellow and orange
Perfume	Yellow and purple
Coffee	Yellow and orange
School	Yellow and orange
Soap	Yellow and green
Summer camps	Yellow and green
Candy	Yellow and red
Summer beverages	Yellow and green

Combinations of Colors

Yellow and blue, Red and green } Preferred by men and women alike

This list alone is evidence of the fact that our associations and experiences with color in everyday life determine to a considerable extent our color preferences. This fact should be taken into consideration by the writer in suggesting color effects for his original stories. To take an absurd example, it would not do to suggest green soup dishes and plates for a shipboard scene in which the principal characters were supposed to be seasick. The effect upon the audience would probably prove altogether too emotionally unpleasant. On the other hand, some of our normal and pleasant color experiences in everyday

[2] *Applied Psychology, Its Principles and Methods* (D. Appleton & Company, 1927).

life may well be carried over into the suggested color setting for a picture, with the result of greatly enhancing its entertainment value.

Aside from our associations between color and objects or experiences of everyday life, it seems probable that there are certain natural, or naïve, color preferences and emotional meanings of color. In an experiment which one of the writers conducted at Columbia University in 1928,[3] sixty subjects—thirty men and thirty women—chosen at random from different occupations, were asked to make a list, placing the four primary colors, blue, red, yellow, and green, in order of their preference. The results of this experiment were as follows:

COLOR PREFERENCES

	Red	Yellow	Green	Blue
First Choice				
Male	6	0	2	10
Female	5	3	7	9
Second Choice				
Male	6	1	4	7
Female	4	4	10	3
Third Choice				
Male	5	3	9	1
Female	9	8	4	3
Fourth Choice				
Male	1	14	3	0
Female	6	9	2	7

[3] W. M. Marston, "Preliminary Report of Color Preference Experiment," *Psyche*, October, 1929.

Giving four points for first choice, three for second choice, two for third choice, and one for fourth choice, the following scores were obtained:

Male		*Female*	
Blue	63	Green	68
Red	53	Blue	58
Green	41	Red	56
Yellow	23	Yellow	49

It is interesting to note that blue scored first in the male choice, while green scored the largest number of points in the female list. If we considered the whole group, irrespective of sex, blue would be the color preferred. Yellow was the color least liked by both men and women. But we may also note that yellow did not receive a single first choice from the men, while three women said they liked yellow best of the four primary colors.

These same subjects were shown motion picture episodes calculated to arouse the four elementary emotions—compliance, dominance, inducement, and submission. The bodily responses of all of these subjects were carefully measured during each of the picture episodes, including the subjects' blood pressure, grip tension, and sweat gland activity. In this way, it was possible to tell which primary emotions the subjects responded to most strongly.[4] The following tabulation gives a list of the emotions responded to by men and women, in order of the total intensity of their response:

[4] W. M. Marston, "Bodily Symptoms of Elementary Emotions," *Psyche*, October, 1929.

ORDER OF MAGNITUDE OF BODILY SYMPTOMS OF EMOTION

	Men	*Women*
1.	Dominance	Compliance
2.	Compliance	Inducement
3.	Inducement	Dominance
4.	Submission	Submission

It is interesting to note that this order of emotional response corresponds rather closely to the color preferences given above, according to a suggested linkage between elementary emotions and primary colors which had been previously suggested by one of the writers. This suggested correspondence was as follows:

Dominance	Blue
Compliance	Green
Inducement	Red
Submission	Yellow

Placing together the order of emotional response and the order of color preference for the two groups, we find the following:

	Men		*Women*	
1.	Blue	Dominance	Green	Compliance
2.	Red	Compliance	Blue	Inducement
3.	Green	Inducement	Red	Dominance
4.	Yellow	Submission	Yellow	Submission

The first and last choices of color and the first and last elementary emotions correspond precisely.[5] The two intermediate colors and emotions are found interchanged in order in both cases. But, in both color ratings and

[5] W. M. Marston, *Emotions of Normal People* (Harcourt, Brace), 1928.

ratings of emotional responsiveness, the difference between these two intermediate values was very slight.

Color preferences obtained from much larger groups than the one used in this experiment, in fact, indicate that men, on the whole, prefer green to red. Thus it would seem that there exists in these results a strong indication that naïve color preferences correspond rather closely to the subjects' responsiveness to each of the elementary emotions along the lines of the linkage previously suggested.

In other words, it would seem psychologically probable that people who are extremely dominant prefer the primary color blue, that people who are predominantly compliant prefer the color green, and that persons who are predominantly submissive prefer yellow. Of course, we must remember that these linkages, let us say, between primary colors and elementary emotions indicate only the natural tendencies due to inherited structure of the body and brain. Such natural tendencies are, of course, modified and sometimes totally reversed by later experiences in life. Nevertheless, the natural tendencies to some definite linkage between primary colors and elementary emotions doubtless remain and probably influence us in everyday life to a much greater extent than we realize.

Musicians frequently describe the tones of a given instrument or voice in terms of color. Paderewski, for example, is said to describe his own playing as predominantly red. Some artists assert that they actually see colors corresponding to certain notes or combinations of tone. In the same way, it is quite probable that the predominating color in a motion picture set would be capable, in itself, of arousing certain background emotions in the

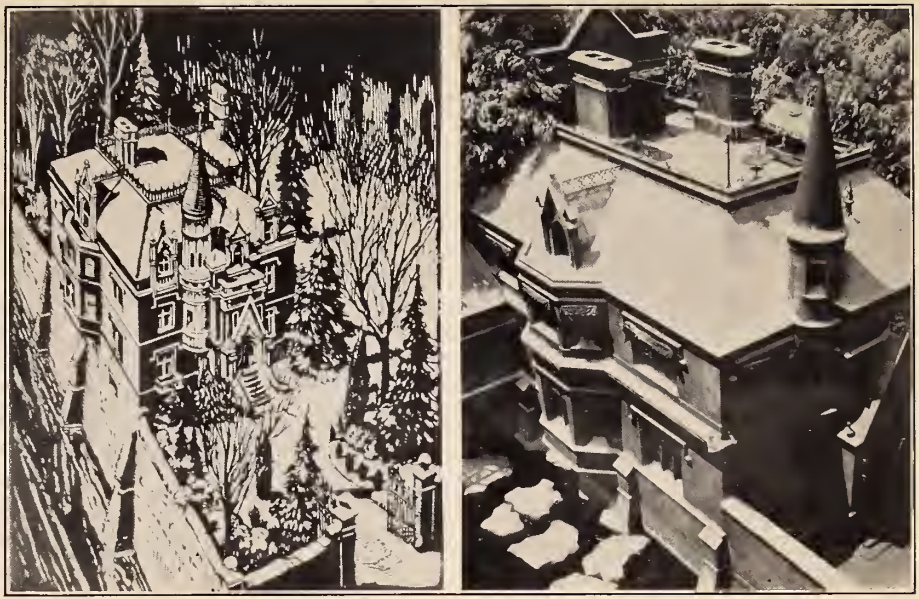
minds of a motion picture audience. Though the art of thus arousing emotion by means of predominating color is yet in its infancy, it is worth thinking about.

Enterprising authors may well consider color possibilities in various parts of their stories, which might enhance the emotional effect supposed to prevail in this part of the plot, along the lines suggested. We cannot, of course, guarantee that the average motion picture editor will take such color-emotion suggestions seriously at the present time. But it is true that producers are always on the lookout for new and original ideas which will create outstanding features for their own pictures.

We also have the precedent of the colored flood lights used in leading motion picture theaters to enhance the total emotional value of the performance. This precedent, first set by the New York houses, is now being widely followed in motion picture theaters throughout the country, with very gratifying results. It is within the realm of probability that the prevailing elementary emotions in different parts of a motion picture story may be analyzed by production staffs in the near future, with a view to designing colored sets and costumes especially to enhance these elementary emotional effects. One or two studios, in fact, are even now organizing special color units, with experts competent to design color effects along these lines.

Entirely aside from the specific use which may be made of color to enhance corresponding emotions, it is certainly true that the more perfect the combination of plot, dialogue, sound, and color which can be put into an original story, the greater chances the story will have of being purchased and produced. Readers and editors, as well as other studio executives, often respond subconsciously to

artistic touches which they are wholly incapable of analyzing or explaining intellectually. The artistic individual responds instantly to subtle harmonies, and it is well worth the time of any story writer to suggest all the practical artistries of scene and color which lie within his power to originate.



S. S. Van Dine Designed This Set

The famous detective-story writer designed the exterior set used in the all-dialogue adaptation of his novel, *The Greene Murder Case*. The woodcut at the left appeared as a frontispiece in the book, and from it was made the set at the right. (Courtesy of Paramount.)

APPENDIX I

GLOSSARY

Action: any behavior, screen business, or dialogue, or a combination of these, which adds meaning to the scene portrayed and which contributes to the solution of the initial dramatic situation.

Angle: the segment of the scene being photographed on which the camera lens is focused.

Backdrop: an artificial background for a scene, usually painted on a curtain.

Back lighting: illumination back of characters being photographed.

"Blope" (sometimes **"bloop"**): to eliminate foreign sounds from a film.

Business: any slight action of characters or manipulation of properties which lends significance to the main screen action.

Cast: the principal characters of a moving picture.

Circle vignette: *circle-in* and *circle-out;* the practice of dimming the sharp outline and frame of a scene to produce an artistic effect.

Close-up: a near and enlarged view of actors or stage properties.

Continuity: picture and sound sequences, usually placed in the script in parallel columns, describing all the scenes for the picture concerned in their order of appearance on the screen.

Cutting: removing scenes from the film.

Cut-back: flash of a scene or any part of a scene which has been shown before.

Diaphragm: camera lens device to enlarge or make smaller any scene in the continuity, the use of which is sometimes indicated by the directions *diaphragm in* and *diaphragm out.*

Diffuser: a device used to diminish lights and to distribute light rays.

Director: the person who supervises all the details of producing a moving picture.

Dissolve: to allow parts of scenes to overlap for the purpose of pictorial or dramatic effect. *Dissolving in* and *dissolving out* are directions used in employing this device.

"Dolly": a moving platform, with rubber-tired casters, on which the camera may be placed in taking sound pictures in which no outside noises of any kind are permitted.

Double: a person, not a member of the screen cast, who substitutes for a screen character in one or more scenes for any purpose whatsoever.

Double exposure: the placing of one film upon another; or the combination in one scene of two separately photographed parts.

Drums: large wooden wheels on which film is dried.

"Dubbing": a method of doubling the voice on the screen after the photographing of the picture.

Dummy: a figure manufactured to substitute for real actors, particularly in the shooting of scenes involving danger to life.

Echometer: a device used to discover the source of film sounds which must be eliminated.

Exterior: a set representing an outdoor scene.

Extra: a person hired to fill in for scenes requiring characters other than the original screen cast.

Fading: the process of changing the amount of light admitted to the camera lens, in order to make a scene gradually appear or disappear. The directions *fade-in* and *fade-out* refer to this process.

Flash: the reshowing of a few feet of film to refer the spectator for any purpose to a scene previously viewed.

Film: a celluloid ribbon, usually 1⅜ inches wide, coated with a substance containing silver nitrate, highly sensitive to light, and perforated to fit the camera. For description of film used in recording sound, see Chapter X.

Flat: see **Backdrop.**

Frame: the rectangle made by one exposure of a film.

Insert: a photographed letter, telegram, etc., shown to further plot development of picture.

Interior: an artificial indoor scene.

Interlock: a direction indicating that camera and sound recorder are enmeshed.

Iris: see **Diaphragm.**

Jump: a break in the film action caused by improper matching of shots.

Klieg light: lights used to illuminate studio sets. These are not used for sound pictures.

Lap dissolve: the gradual fading of one scene into another.

Lead: the chief character in a motion picture.

Location: any place away from the studio where the cast is temporarily located for the photographing of scenes.

Long shot: a picture of a distant scene.

Lot: The grounds belonging to a motion picture company.

Mat: a device placed over the camera lens to outline the object being shot so as, for example, to give an impression of an object being seen through a keyhole.

Medium shot: photograph of a moderately distant scene.

Microphone or "Mike": an instrument which catches sounds and transmits them to sound-recording devices. In some studios, separate microphones are used for transmitting the voices of men and women.

Mixer: a device used to control, modulate, and intensify the volume of voice in the making of a picture.

Negative: a film on which scenes are photographed.

Out-of-focus: a scene blurred by incorrect lens focus; sometimes used to produce artistic effects.

Pan: contraction of *panorama;* direction to camera man to swing camera without swinging tripod.

Photo-electric cell: see Chapter X.

Play-back: a device which repeats the voices, recorded on a wax record shortly after the film is completed.

Positive: printed reproductions from a negative.

Pre-view: an advance showing of an unreleased picture.

Print: see **Positive.**

Producer: the individual or organization assuming business and financial responsibility for the production of a film.

Projection machine: a mechanical device which throws a picture on a screen.

Projection room: a room reserved by a motion picture company for the private showing of pictures.

Prop: abbreviation of property; any article used in a scene of a moving picture.

Reel: approximately 1,000 feet of film.

Reflector: a silver- or white-canvassed frame which reflects light upon an object.

Reissue: to release a film after it has once been shown and retired.

Release: to place a motion picture on market.

Remote control: the method by which sound is transmitted from a distant point on location to the studio, and there recorded.

Retake: to film a scene more than once.

Reverse crank: direction to turn camera crank in the opposite direction from usual to give effect of action being reversed.

Rush: the exhibition of all the raw shots of a picture before they have been selected and put in sequence.

Scenario: the complete synopsis of a moving picture plot.

Scene plot: lists of scenes in pictures, so grouped as to indicate the number to be photographed in each set.

Scratch titles: temporary titles photographed directly on the film for working purposes.

Script: abbreviation of manuscript; see **Continuity.**

Sequence: a series of scenes showing unbroken action.

Skeleton set: a substitute set, made up of odds and ends of properties, to use for rehearsal of scenes before their filming on the complete and final set.

Set: artificial background, painted or constructed especially for a single picture.

Shoot: to photograph.

Shot: a scene.

Still: a non-animated picture, usually used for advertising purposes.

Soft focus: process of placing gauze over the camera lens to soften the effect of the photographed object.

Sound-on-disc: see Chapter X.

Sound-on-film: see Chapter X.

Sound track: see Chapter X.

Sound truck: see **Dolly.**

Splicing: cementing together pieces of film.

Stock shot ("Store show"): purchasable films of such stock scenes as the tomb of the Unknown Soldier, the Arc de Triomphe, etc., for insert to lend atmosphere to a picture.

Split stage: a device used to photograph double exposures or a single character taking two parts.

Studio: plant where pictures are produced.

Spot: a large light, much like a stage spot-light.

Sunlight arc: a light whose rays give intense illumination; used to light a set from above.

Telephone lens: camera lens having a long enough focus to be able to photograph a close-up at the usual distance from the object being shot.

Telescopic lens: a lens having a short-focus to produce pictures giving the effect of depth.

Theme song: the theme of a picture presented in lyric form during its showing.

Title: the name of any photoplay.

Truck back: to back the camera away from the scene being photographed, during the action.

Truck up: to move the camera toward the scene being photographed, during the action.

Vehicle: a story acceptable for a moving picture star.

Wide angle lens: a lens increasing the scope of the camera, broadening the space of the stage to be photographed.

APPENDIX II

STUDIO SETS AVAILABLE FOR STORIES

SINCE every company has hundreds of thousands of dollars invested in magnificent sets, the writer will aid his own cause by keeping these in mind as he prepares his story. Naturally, a story which can make use of several expensive sets already installed can be produced more cheaply than one which calls for wholly new sets. And that scores heavily in favor of the former.

Following is a list of the more important sets now existing somewhere in Hollywood. Naturally, a complete list would be useless, as there are many sets which have little or no value. The selection is entirely our own; and no apology is made for omitting many.

PARAMOUNT FAMOUS LASKY

Boat hull, 12 feet long with three decks: tramp steamer, passenger steamer, transport steamer decks.
Model of the "Constitution," 12 feet long over all.
Model of Light Ship "Relief" at San Francisco, 5 feet long.
Model of yacht, 6 feet long.
Model of U. S. S. "Cruiser" (French cruiser deck New York), 12 feet over all.
Model of U. S. S. "Indiana," 10 feet over all.
Model of army tank, 28 inches long.
Model of cruiser "Olympia" (Dewey's flagship), 5 feet, 4 inches long.
Model of sailing ship, 2 feet long.
Model of tractor, 2 feet long; and five trailers, 2 feet, 6 inches long.
Small steamer passenger deck, 6 feet long.

Two sailing ships, 7 feet long.
Sailing ship, 10 feet over all.
Free balloon and basket, 24 inches diameter.
Boat, 7 feet long ("Jolly Roger" used in *Peter Pan*).
Several land and sea planes, different sizes.
Dirigible, 36 inches long.
Russian passenger train, driven by electric power car; 100 feet of track; engine, 4 feet, 6 inches long; seven coaches.
Elevated railroad and eight cars.
Large bridge span, 34 feet long.
Two small full-rigged sailing ships, 3 feet, 6 inches long.

Warner Brothers

Concrete fort set. Exterior with several small interiors; has been used as prison camp in South Africa; suitable for any Mexican atmosphere.
New England street. With three interiors.
Rock set. With waterfall and little pool at bottom, and cave interiors; height, 75 feet.
French village. One interior, French barnyard, street.
Coney Island set. With boardwalk; has been used as Chinese street.
New York uptown street. Showing subway entrance; brick tenements.
European building. Has been used as bank; also European apartment entrance.
Exterior theater. Also hotel entrance.
Set for Mexican scenes; also Javanese fishing village; Chinese street.
Period boat. With deck, and tank surrounding, so that small boats can come to it; year of 1750; can be remodeled to represent any period boat very easily.
New York subway. With four practical cars run on track; can be hooked for lights, giving long shot of the subway cars coming into subway, 250 feet; one car completely equipped on inside; gates, exits, entrances.
Colonial home. Grounds and lawn in front; real trees; driveways in front of home and in front of gate leading to house.
Mansion. Was used as exterior of Italian mansion; about the Sixteenth Century; also shows driveways and gates.

Javanese street. Can be used as fishing village or South Sea water front.

Hacienda. Gates and entrance into interior of hacienda courtyard; also driveway and gates.

Water tanks with lake. Four hundred feet long, with backing for day or night scenes; can be filled with four to five feet of water; excellent for miniature shots of water scenes; track to run boats on.

Concrete backing. Thirty feet high, 300 feet long.

Exterior coal mine. Chute and elevator.

Deck of boat. Period 1800; used in *When a Man Loves.*

New York East Side street. So arranged that it can be shot from eight or ten different angles.

Panorama with treadmill. Twenty feet long; excellent for chase scenes of all kinds.

Bark "Narwhal." Length, 158 feet; beam, 32 feet; depth of hull, 17 feet. Can also supply twelve storm tanks with flume on top which is all equipped for wonderful storm effects on the boat. Storm scenes in *The Sea Beast* were taken with these tanks and the Bark "Narwhal" alongside. Can also board a company on this boat. Located at Craig's Ship Yards, Long Beach, California.

Harold Lloyd Corporation

Street set. Approximately 600 feet long, with an interesting bend in the center; cross street at this bend 150 feet long, faced on both sides. Finished at one end with an across-the-street row of buildings 130 feet long, the other end backed by a series of buildings approximately 230 feet long. These in turn are backed against a turn in the main portion of the street, making another complete street in itself, with a typical little park of 1,080 square feet in area in its center, forming a square at that end of the street. The street is approximately 60 feet wide, with full sized 13 foot sidewalks, affording plenty of light making it possible to shoot the entire day. Standard gage street car tracks the entire length of the street and circling the park, switching back into itself at that end of the street. The buildings average three stories in height, and streets have fire plugs, lamp-posts, etc.

Cecil B. De Mille Pictures Corporation

Home in Strait Settlements. House, gardens, yard.
Chicago street. Bank building with huge columns; could be used for any other important business or public building or station. Theater, shops, street lights, police station, elevated tracks, brownstone houses, drug store, barber shop, cigar store, café, apartment house, etc.
Austrian village. Mill pond, yards, flat-bottom boats, millwheel, houses, interior, etc.
Exterior stone castle.
New England farmhouse. Yard, fence, garden, trees, gate, etc.
Interior and exterior Moroccan fortress and court.

Universal Pictures Corporation

College campus. Dormitory, gates.
Brownstone front set. New York or other large city.
New England village set. Blacksmith and other shops; New England houses.
Library. Can be used for any similar public building.
Small middle western village. Country hotel, etc.
Village street. Entrance to circus or country amusement park at end of street.
Ranch. Entrance to ranch; house, corrals, street, barn.
Grandstand. For college games, etc.
Ore-crushing house. Mine, with aërial cables going across.
Barracks. Cannon.
Trenches. Sand bags and ladders.
Circus. Tents, side-shows, concessions, vans, canvas posters, ticket booth, animal cages.
Zoo. Elephant, lions, baby lions, monkeys, black cats, bear cubs, police dogs, camels, trained horse.
Negro village. With log cabins.
French village.
Notre Dame Cathedral.
Notre Dame Square. Houses around square.
Subterranean arches. Can be used as underground passages, sewers of Paris, etc.
Patio. Spanish house, courtyard, palm trees, etc.
French street. Archway, houses, stores, etc.

Viennese street.
Spanish courtyard. Fountain, mansions, gardens.
Southern colonial house and grounds.
Deserted house.
Deserted village.
Exteriors in New York or other large city. Subway entrance; furniture store; courthouse; Washington Square (New York) house; apartment house in New York.
Bungalow.
Breeches buoy.
Old style boat. Used in *The Man Who Laughs.*
Gangplank to passenger steamer.
Deck, passenger steamer.
Pier. For landing boat.
Fire wagons. Old-fashioned.
Mail coach. Old-style Western.
Automobile. Old-style.
Tramcar. Small country car.
Wooden caravan on wheels. Used in early French picture.
Saddle room. Interior, showing saddles.
Japanese pagoda.
Organ loft. Interior, showing church window; pipe organ.

WILLIAM FOX CORPORATION

Street in Ireland.
Old English street. Houses, church, etc.
Old European street.
Russian stockade. Log cabins, trading post.
New England street. Houses, courthouse, residences of well-to-do New Englanders.
Colonial house.
New England farmhouse. Windmill.
Basque village.
Spanish hacienda. Patio.
Spanish hotel. Courtyard, pool.
English country home.
City theater entrance.
Park with city background.
Large residences. New York or other large city.
Large city street. Public buildings, courthouse, elevated tracks, café, bank, store fronts, etc.

New York tenement street.
London book shops.
Spanish street.
Spanish residence.
Spanish city corner.
Spanish courtyard.
Balcony of Spanish residence.
Spanish palace.
Spanish plaza.
Spanish street corner.
Spanish street.
Spanish buildings.
Western street. Stores, etc.
Mountain lodge.
Bunk houses.
South Sea lagoon.
Cave with water.
Large city plaza.
Grandstand with tracks.
Alley in tenement district.
Warehouses on water.
Dutch boat and pier.
Arabian street scene.
Venetian street. Canal, houses.
German street.
Country street of small town. Boarding-house, hotel, barber shop, etc.

Metro-Goldwyn-Mayer Corporation

Alaskan village. Houses, stores, saloons, hotel.
Colonial farm. Grounds, farm yard, residence, etc.

APPENDIX III

MOTION PICTURE PERIODICALS

The Billboard.—Weekly, national, semitrade.
Brevity.—Monthly, national, trade.
Cinema Art.—Monthly, national, fan.
Daily Screen World.—Daily except Sunday and Monday, regional, trade.
The Exhibitor.—Semimonthly, regional, trade.
Exhibitor's Daily Review.—Daily except Saturday, trade, national.
Exhibitors' Forum.—Weekly, national, trade.
Exhibitors' Herald and Motion Picture World.—Weekly, national, trade.
Exhibitors' Tribune.—Weekly, regional, trade.
Film Curb.—Weekly, regional, trade.
Film Daily.—Daily, national, trade.
Film Daily Year Book.—Encyclopædia of the motion picture industry, published yearly, about January 1, by *The Film Daily.*
Film Fun Magazine.—Semimonthly, national, fan.
Film Mercury.—Weekly, national, trade.
Film News.—Weekly, regional, trade.
Film Spectator.—Semimonthly, regional, trade.
Film Trade Topics.—Weekly, regional, trade.
Greater Amusements.—Weekly, regional, trade.
Harrison's Reports.—Weekly, national, trade.
Hollywood Filmograph.—Weekly, national, trade.
Hollywood Magazine.—Monthly, west coast, trade.
Hollywood Vagabond.—Semimonthly, national, trade.
Illinois Exhibitor.—Regional, weekly, trade.
Inside Facts.—Weekly, west coast, trade.
Japanese Movie Magazine.—Monthly, national, fan.
Michigan Film Review.—Weekly, regional, trade.
Motion Picture Classic.—Monthly, national, fan.
Motion Picture Digest.—Weekly, regional, trade.
Motion Picture Journal.—Weekly, regional, trade.

Motion Picture Magazine.—Monthly, national, fan.
Motion Picture News.—Weekly, national, trade.
Motion Picture Projectionist.—Monthly, national, trade.
Motion Picture Record.—Weekly, regional, trade.
Motion Picture Review.—Semimonthly, regional.
Motion Picture Times.—Weekly, regional, trade.
Motion Pictures Today.—Weekly, national, trade.
Movie Age.—Weekly, regional, trade.
Moving Picture Stories.—Weekly, national, fan.
National Exhibitor.—Semimonthly, regional, trade.
New England Film News.—Weekly, regional, trade.
New York State Exhibitor.—Semimonthly, regional, trade.
Ohio Showman.—Weekly, regional, trade.
Pacific Coast Independent Exhibitor.—Semimonthly, regional, trade.
Philadelphia Film World.—Weekly, regional, trade.
Photoplay Magazine.—Monthly, national, fan.
Picture Play Magazine.—Monthly, national, fan.
Pittsburgh M. P. Bulletin.—Weekly, regional, trade.
Reel Journal.—Weekly, regional, trade.
Screen Secrets Magazine.—Monthly, national, fan.
Screenland Magazine.—Monthly, national, fan.
Screen Press.—Weekly, national, trade.
Sound Waves.—Semimonthly, west coast.
Variety.—Weekly, national, semitrade.
Weekly Film Review.—Weekly, regional, trade.
Zit's Theatrical Newspaper.—Weekly, national, semitrade.

APPENDIX IV

BIBLIOGRAPHY ON THE EMOTIONS

ANGELL, J. R., and THOMPSON, "Organic Effects of Agreeable and Disagreeable Stimuli," *Psychol. Rev.*, 1896.

BENUSSI, VITTORIA, "The Breathing Symptoms of Lying," translated by D. Curwen from "Die Atmungsymptome der Lüge," *Archiv für die gesamte Psychol*, 1914, pp. 244-273.

BINET, A., and VASCHIDE, N., "Influence de Travail des Emotions sur la Pression du Sang," *L'Année Psy.*, 1896, pp. 127-183.

BLATZ, W. E., "The Cardiac, Respiratory, and Electrical Phenomena Involved in the Emotion of Fear," *Jour. Exp. Psy.*, VIII (1925), pp. 109-123.

BURTT, H. E., "The Inspiration-Expiration Ratio during Truth and Falsehood," *Jour. Exp. Psy.*, IV (1921), pp. 1-23.

DEARBORN, G. VAN N., *The Emotion of Joy* (*Psychological Review*, Monograph Series, 1899).

ENG, HELGA, *Experimental Investigations into the Emotional Life of the Child Compared to That of the Adult*, 1921 (tr. 1925).

GOLTZ, F., "Der Hund ohne Grosshirn," *Archiv für die gesamte Physiol.*, LI (1892), p. 570.

JAMES, WILLIAM, "Physical Basis of Emotions," *Psychol. Rev.*, I, (1884), pp. 516-529.

JONES, MARY C., "Elimination of Children's Fears," *Jour. Exp. Psy.*, 1924, pp. 382-390.

KRASNOGORSKI, N., "Über die Bedingung-Reflexe im Kindes alter," *Jahrbuch f. Kinderheilkunde u. physische Erziehung*, series 3, XIX (1909), pp. 1-24.

LARSON, J. A., "Modification of the Marston Deception Test," *Jour. of Crim. Law and Criminol.*, XII: 3 (1921), pp. 390*ff*.

———, "Present Police and Legal Methods for the Determination of the Innocence or Guilt of the Suspect," *Jour. Crim. Law and Criminol.*, X, pp. 219*ff*.

MARANON, G., "Contribution à l'Etude de l'Action Emotive de l'Adrenoline," *Rev. Française d'Endocrinologie*, II (1924), pp. 301-325.

MARSTON, W. M., "Systolic Blood Pressure Symptoms of Deception," *Jour. Exp. Psy.*, II (1917), pp. 117-163.

———, "Reaction Time Symptoms of Deception," *Jour. Exp. Psy.*, III (1920), pp. 72-87.

———, "Psychological Possibilities in the Deception Tests," *Jour. Crim. Law and Criminol.*, XI (1921), pp. 552-570.

———, "Sex Characteristics of Systolic Blood Pressure Behavior," *Jour. Exp. Psy.*, VI (1923), pp. 387-419.

———, "Theory of Emotions and Affection Based upon Systolic Blood Pressure Studies," *Am. Jour. Psy.*, XXXV (1924), pp. 469-506.

———, "Negative Type Reaction Time Symptoms of Deception," *Psy. Rev.*, 1925, pp. 241-247.

———, "Primary Emotions," *Psy. Rev.*, 1927.

———, *Emotions of Normal People* (New York, Harcourt, Brace & Co., 1928).

MATEER, FLORENCE, *Child Behavior* (Boston, Richard G. Badger, 1918).

MOORE, HENRY T., and GILLILAND, A. R., "The Measurement of Aggressiveness," *Jour. Applied Psy.*, 1921.

NIXON, H. K., *Psychology for the Writer* (New York, Harper & Brothers, 1928).

SHERRINGTON, C. S., "Experimentation on Emotion," *Nature*, LXII, pp. 328-333.

SMITH, W. W., *The Measurement of Emotion* (London, 1922).

SOLIER, F., "Recherches sur les Rapports de la Sensibilité et de l'Emotion," *Revue Philos.*, XXXVII, p. 241.

WATSON, J. B., *Behaviorism* (New York, 1925).

WECHSLER, DAVID, *The Measurement of Emotional Reaction: Researches on the Psycho-galvanic Reflex* (New York, 1925).

WOODWORTH, R. S., *Psychology* (New York, 1921).

WUNDT, W., *Grundzüge der physiologischen Psychologie*, II, 1902; *Outlines of Psychology*, 1907.

INDEX

Alibi, 197; velocity of dialogue in, 115
Audience, limitations of average, 14

Boles, John, 34
Bow, Clara, 33
Brenon, Herbert, 47
Broadway, 20*f.;* synchronization in, 228
Brutality and gruesomeness, censorship of, 53*ff.*
Bulldog Drummond, velocity of dialogue in, 115

Canary Murder Case, suspense in, 90
Captivation, 164*ff.;* illustrations of gross and subtle behavior in, 178*ff.*
Censorship regulations, 52*ff.*
Character, how to portray, 100*f.;* time limitation for screen portrayal of, 101; depicted in emotional moment, 101; total personality and traits of, 102; trait, defined, 104; determined by three stages of action, 106; characteristic acts, 104*f.*; subtly depicted, 150
Chevalier, Maurice, 48
Coincidence, right and wrong use of, 88
Color, pictures in, 241; additive processes in photography of, 242; psychological principles in photography of, 242; chart, 243; technical principles in photography of, 244; cause of flicker, 246; cause of fringe, 246; multiple film processes, 249; multiple image process, 250; subtractive processes, 252; imbibition process, 254; *Fox Follies* and, 258; in relation to the writer, 259; emotional values of, 261; preferences, 262, 263
Compliance, defined, 130, 131; illustrations of behavior in, 138*ff.*
Conferences, editorial, 34*ff.*
Contract players, 33
Crime, censorship of, 61*ff.*

DeMille, William, 197
Derogatory titles, censorship of, 67
Desert Song, 34
Desire, intellectual, 156; illustrations of behavior in, 170*ff.*
Dialogue, 108; writing of, 111; word choice and, 113; length of film, and, 112; sound recording and, 113; velocity of, 114; intensification of plot and character by, 114; compared in drama and sound picture, 115; music and, 202
Disc records in sound photography, 229
Doctor's Secret, plot technique in, 85
Dominance, 131*ff.;* destructive and competitive, 132; illustrations of behavior in, 140*ff.*
Drugs, poisonous, censorship of scenes and titles, 70*ff.*

Dubbing, 228
Dynamite, velocity of dialogue in, 115; dark screen used in, 207

Editors, conservatism of, 32; conference of, 34
Emotion, of audience, how aroused, 16*ff.*; nature of responses in, 17, 107; importance of portrayal of, 127; defined, 129; expressed in action, 135; violent behavior and, 137; restraint and, 138; normal relations of elementary, 146; use of pleasant and unpleasant, in stories, 149; compound, explained, 170; unpleasant, 182
Erotic excitement, 156*ff.*

Fake twists in plotting, 93
Fear, 182
Feelings, 128
Film successes, analysis of, 21
Fox Follies, color process in, 258
Fox Movietone sound recording apparatus, 223

Gambling, censorship of scenes and titles, 68
Government censorship of scenes and titles, 68

Hatred, 188; use of, in stories, 192
Heroes, 150
Human interest, nature of, 18*ff.*

In Old Arizona, music used in, 203
Inducement, illustrated, 142; behavior in, 143*ff.*
Innocents of Paris, 48
Interlocking, 226

Jealousy, 188
Jolson, Al, appeal of, 22

Kinema Color process, 246

Language, factors in, 109
Last of Mrs. Cheney, rhythm in, 120
Legitimate drama, passing of, 46
Liquor, censorship of scenes and titles with, 69
Love, 160
Love Trap, experiment with, 154*f.*
Lummox, 47

Melodrama defined, 87
Men and love, 160
Modes in pictures, 25
Monitor room, 226
Motion pictures, technique of, 215. *See* Pictures; Sound Pictures.
Movie audiences, quality of, 14*ff.*
Multicolor process, 252
Muni, Paul, 92
Music and dialogue, 202

News stories and picture material, 26
Newspapers, value of stories in, 26
Nudity and exposure, censorship of, 69

On With the Show, 26

Pagan, use of passion in, 162, 202*f.*
Passion, 156*ff.*
Photo-electric cell, 232
Photography of sound waves, 219
Pictures, mode of night club, 20; sex interest in, 21; modes in, 25; successes, 22. *See* Sound pictures.
Pleasantness and unpleasantness, 128
Plots, defined, 83; fake twists in, 93; audience and, 94
Practical considerations in screen productions, 34
Production, cost of, 32, 43

Projection of pictures, 231
Public taste, 17

Rage, 185
RCA Photophone, 223
Resonance, principle of, 236
Rhythm, defined, 119; varieties of, 120; patterns of, 121*ff.*; dialogue and esthetic effect, 125

Satisfaction, 152*ff.*; tag, use of, in stories, 154; behavior in, 173
Saturation point in interest, 20
Saturday's Children, sound and silence in, 201
Selling stories, 31*ff.*; problem of, 47
Sequences, 98
Sets, 44
Sex interest in pictures, 22
Sex-suggestive scenes and titles, censorship of, 72*ff.*
Shannons of Broadway, stage and picture dialogue compared, 115*ff.*
Show Boat, 98
Silent pictures, factors of, 11
Skeleton sets, 47
Sound Pictures, importance of, 4; unique art, 6; basic factors of, 11; story values and, 12; how different from silent, 195; realism and, 197; subtleties of, 198; comedies in, 199; combined with silent shots, 200; difficulties in, 204, 227; technique of, 215; photography of, 218; electrical and mechanical principles of, 218; recording sound on film, 222; variable area and density methods in, 223; best methods of recording, 230; projection of, 231; limitations of, 235
Stories, emotional effect on audience, 13; limitations of, 14; reasons for rejection of, 34; how to submit, 34; problems in accepting, 34; importance of good building of, 48; how to sell, 50; factors in patterns of, 87; plot of, 83
Strange Interlude, 101
Submarine, 27
Submission, illustrated, 144; behavior in, 145
Suspense, four varieties of, 89*ff.*
Synchronization, method of, 225

Taboos, 167
Technicolor, 252
Theme song, how to use, 202
Thru Different Eyes, 91
Titles, changes in, 209; how to select, 209; good examples of, 211; danger of figurative, 212
Trial of Mary Dugan, 206

Valiant, 92
Villains, 150
Vitaphone records, 229
Vulgarity and indecency, censorship of, 81

Weary River, 202
Wheel of Life, 88
Whispering, effects of, in sound pictures, 198
Whitebeck, Frank, on titles, 210
Wild Party, 33
Women and love, 160
Wonder of Women, sound and silence in, 200
Working titles, 209
Writers, opportunities and difficulties facing, 8, 10, 14

Scanned from the collection of
Robert Farr

Coordinated by the
Media History Digital Library
www.mediahistoryproject.org

Funded by a donation from
University of South Carolina Libraries
and College of Arts and Sciences